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ABSTRACT

A program of education including training materials is presented to improve the technical proficiency of medical record clerks in small, rural hospitals. The program is planned for fifteen days of instruction or approximately 120 hours including evaluation, orientation and discussion sessions. Students are expected to have a high school diploma and no training beyond that received on the job. The material in the manual is organized in a unit plan to allow the instructor to fit the material to his teaching situation. (The student manual for the program is available as LI 003096.) (AB)

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COURSE OF STUDY

MEDICAL RECORD CLERK TRAINING PROGRAM

INSTRUCTOR'S GUIDE

For Medical Record Personnel
in Small Rural Hospitals in Colorado

(3.16)

349 p.
82 Ref.

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PREFACE

The need for improvement of medical records in small hospitals became apparent through Medicare surveys by the Colorado Department of Health in 1967. Some method of training needed to be found which would insure the fulfilling of requirements for Medicare certification as stated in "Conditions of Participation" for hospitals.

The training program had to include management attitudes and hospital organizational functions as well as basic knowledge and skill development. This was necessary since most small rural hospitals assigned administrative responsibility for medical records to untrained clerical personnel who had little or no exposure to medical record science because of the unavailability of Registered Record Librarians in their geographic areas.

The problems facing Colorado in the medical record area were so universal that the Division of Medical Care Administration chose to finance a pilot training program in Colorado. The results achieved by the use of this program in our state have been so gratifying that it is with a great deal of pride that we present it to all other states desiring to improve the quality of their medical records and upgrade the technical proficiency of their non-professional medical record personnel.

Roy L. Cleere, M. D.
Director: Colorado Department of Health

DIRECTOR'S STATEMENT

The Colorado Training Program for Medical Record Clerks which was in progress for two years has reached a successful conclusion. The program, instituted as a pilot project, was dedicated to the hospital physicians, nurses, and patients, all of whom need medical records as the documents which promote good patient care. The purpose of the program was to improve the quality of medical records within hospitals of smaller, Colorado communities by upgrading the knowledge and skill of their personnel. The implementation of the program included the involvement of professionals from both medical records and education in an unprecedented, experimental, and challenging project. Medical record services were to be upgraded by improving the training and technical proficiency of the clerks, and the medicare certifications for hospitals were to be thus extended. The program was to promote good patient care by stimulating non-trained members of the medical record services toward accreditation as medical record technicians.

This syllabus was developed from the training program. The contents within it should be familiar to those in the medical record profession, and it is organized as a beginning or introductory-type training program in the field of medical records. The syllabus presents materials which have been tested in a successful program, and they are offered here for use and guidance in carrying out other such programs. These materials were so designed as to convey to the student an understanding of the knowledge and skills necessary for achieving professional competence in medical records. The compilation of the syllabus has been done with the expertise and assistance of educators from the University of Colorado who were affiliated with the program from the start. It represents the cooperative and extraordinary efforts of members of the Colorado Association of Medical Record Librarians, the University of Colorado Bureau of Continuation Education, and the Colorado Department of Health.

The contents presented here were used in the three-week classroom program, in the on-the-job instruction and consultation for each student, and in the homework assignments between periods of classroom instruction. It should be noted further that information on an additional and supplemental week of training is included in the appendix. This is included only for informational purposes since it was not offered as part of the contracted training program.

The syllabus aims at improving all medical record areas which are without proper guidance and professional assistance. It is expected that the syllabus will be further improved by those who follow with similar programs, for it is recognized that mistakes have been made in this initial effort. Moreover, based on this experience, it is recommended that, where possible, a fourth week of training be added as an integral part of the program in order to allow sufficient time for laboratory and demonstration periods which are so important.

Because of the nature of the syllabus, all the information pertaining to the training program is not reported in it; hence, it is important that some of this information be related here in a brief explanation to give greater meaning to the project. Much more information may be obtained from those agencies responsible for the publication of materials, documents, and reports which have been developed in the program, but for the purpose at hand we would like to bring to your attention the fact that tests have been carefully constructed and administered in the evaluation of student performance in accordance with the objectives outlined for the program. The evaluation was carried out by an experienced and professionally trained evaluator from the University of Colorado. The results which were obtained demonstrate that the program was a success.

In addition, thirty-two of the thirty-four students originally enrolled in the program received certificates of completion, and eighteen of these students were motivated to continue their preparation through a correspondence course for medical record technicians. Also, the success of the program was demonstrated by the changes made by the students in their hospitals. These changes have been identified in the surveys conducted by the State of Colorado for medicare certification.

The cooperation and whole-hearted support of all institutions, agencies, associations, and individuals involved in this project made for its success. Excellent support was given the program by members of the Colorado Department of Health, the Social Security Administration of Health, Education, and Welfare, and the project officers and other members of the Division of Medical Care Administration. The many, many persons who individually have contributed to this program have been recognized through a special acknowledgment listing.

It has been my good fortune to serve as project director. This was a valuable and rewarding experience for me. Special recognition should be given to one group which was especially helpful to me in my job as director. This group was the medical record librarians who as members of the Colorado Association of Medical Record Librarians volunteered as instructors for the program. They gave unselfishly and devotedly to the project and took on these assignments in addition to their full-time employment in their own jobs. All of this was done in the spirit of assisting those hospitals which needed personnel upgraded in professional competence. This group of instructors never could be fully compensated for their true contribution to the program.

Recognition, respect, and heart-felt appreciation are expressed to the educators from the University of Colorado for their continuous, unflagging support and guidance throughout the program and for their great amount of time and effort expended on it.

We have welcomed the ever-present cooperation, loyalties, friendships, and expert guidance and direction which were given by all members of the Medical Record Clerk Training Program Advisory Committee throughout the course of the entire project. We acknowledge, with the deepest sense of gratitude to the committee, their contributions to the smooth, untroubled course which the program enjoyed.

The endorsement given the project by the American Association of Medical Record Librarians through Mary J. Waterstraat, the Executive Director, was greatly appreciated, and we are especially grateful to Margaret Beard who was instrumental in originating the idea of a training program.

Finally, to members of my own Colorado Department of Health, my expressions of gratitude could not begin to convey my appreciation for the full support which was received throughout the entire program. Likewise, without the able assistance of the Assistant to the Project Director, Sylvia Nahman, my participation in this project would have been considerably more difficult.

To the world, may we state that the one concern of medical record librarians and their assistants is dedication to good patient care for which training programs such as this are needed.

Virginia Lee, RRL
Project Director
Medical Record Clerk Training
Program
PH 110-232

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Marion Black, RRL, Director, Medical Record Department,
Mercy Hospital, Denver, Colorado

Loretta Lutz, RRL, Director, Medical Record Department,
St. Joseph's Hospital, Denver, Colorado

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Lower Valley Hospital, Fruita, Colorado
Parkview Episcopal Hospital, Pueblo, Colorado
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St. James Community Hospital, Butte, Montana
St. Joseph's Hospital, Denver, Colorado
U. S. Academy Hospital, Colorado Springs, Colorado
Veterans' Administration Hospital, Denver, Colorado

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Colorado Medical Society for active support of the program.

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INTRODUCTION

OVERVIEW

In this manual, a program of education including training materials is presented to promote the improvement of the technical proficiency of medical record clerks. The program is especially directed at those who are employed in small, rural hospitals. The educational program is planned for fifteen days of instruction or approximately 120 hours including evaluation, orientation, and discussion sessions.

It is anticipated that students in this program will have a high school diploma and no preparation in medical record work beyond that which was previously received on the job. This course may serve as an introduction to medical record science. It is hoped that the students who complete the introductory course will take the correspondence course of the American Association of Medical Record Librarians which should prepare them to take the yearly examination for accreditation as medical record technicians.

In this manual, the material has been organized so instructors may draw on it to teach a number of different topics. The material has not been organized into a series of one hour lessons but rather set up on something of a unit plan; the instructor does need, therefore, to fit the material to his teaching situation. A schedule has been given to show how the material was broken down in one program where three one-week institutes were held; however, the material as presented here could be fitted into a number of different types of time schedules.

The impact of this program on students may be greater when certain special activities are incorporated. Include hospital administrators in the plan so that they receive an orientation to the program and are kept in touch with it. This will mean that the student has greater support back on her job in applying what has been taught. During the initial session, hold an orientation meeting with the hospital administrators and keep them informed of the progress of the program by regular newsletters and reports.

Have instructors make on-the-job visits to students so that they are able to determine their needs and their progress from actual job performance. This activity is of tremendous value, for the instructors are able to follow up the classroom instruction with on-the-job corrections. They are able to assess the job situation so that their instruction has greater relevance to the work of the students. It provides the kind of feedback which makes the program self correcting.

A visit to a medical records department of a hospital for practicum sessions is of great value. The students are able to gain knowledge concerning the operation of a well-run department. Also, evening discussion sessions are helpful, for they give the students an opportunity to meet with instructors in an informal setting and to ask those questions which are of real concern to them. These are great savers of time, for they provide a way to handle individual problems without using class time. Yet another feedback technique which is of great help is student evaluation of the instruction. The instructor, through the students' comments, is able to determine what part of the instruction was really effective and to modify that which failed to meet student needs.

OBJECTIVES OF THE TRAINING PROGRAM FOR MEDICAL RECORD CLERKS

The purpose of the training program for medical record clerks is to impart basic knowledge to and develop the skills of medical record personnel who work in small rural hospitals so that they may better perform the technical tasks associated with the maintenance and custody of medical records. A second purpose of the program is to develop an attitude in trained medical record clerks which will lead to more constructive relationships with the medical staff and administrators.

Hospital. Specific training goals for the clerk in the understanding of the basic principles of hospital organization are:

1. To understand the structure, functions, and interdepartmental relationships of hospital organization.

2. To know the standards and requirements of inspecting, certifying, and accrediting bodies and agencies.

Medical Record Department. The specific training goals for the clerk in understanding the functions of the medical record department are:

1. To understand the basic principles of organization and management of a medical record department.

2. To understand the component parts of a medical record--content of medical records and forms.

3. To evaluate quantitatively a medical record for completeness, consistency of information and accuracy, and the discharge analysis.

4. To understand basic medical terminology and anatomy to facilitate transcription of medical dictation.

5. To code diagnoses and operations according to SNDO and ICDA.

6. To organize and maintain all necessary indices including diseases, operations, physicians, and patients.

7. To use systems of identification, numbering, and filing to insure prompt location of a patient's medical record.

8. To understand how to develop meaningful hospital statistics.

9. To perform secretarial duties, including correspondence, committee meeting minutes, reports, and memoranda.

10. To know medico-legal aspects of medical records.

Personal Knowledge. The specific training goals for the clerk are:

1. To practice good interpersonal relationships with physicians and other hospital personnel.

2. To seek continuous educational training in medical record library science.

TOPICAL OUTLINE OF TRAINING PROGRAM FOR MEDICAL RECORD CLERKS

I. Hospital Organization and Community Role--2 Hours

   A. Health as a Community Affair
   B. Internal Hospital Organization

II. Organization and Management of a Medical Record Department--9 Hours

   A. Hospital Organization and Management
   B. Medical Record Department
   C. Tour of Medical Record Department
   D. Secretarial Services

III. Basic Filing Systems--2 Hours

   A. Filing Arrangement
   B. Four Required Indices Maintained in Medical Record Department
   C. Patient Index
   D. Method of Filing of Medical Record Folder

IV. International Classification of Diseases and Operations--16 Hours

   A. What is ICDA?
   B. Content of Code Book, Volume I
   C. Coding Problems
   D. Coding Problems on Operations

V. Standard Nomenclature of Diseases and Operations--16 Hours

   A. Purposes for Using a Disease and Operation Nomenclature
   B. Dual System of Coding
   C. Derivation of Code Numbers
   D. Supplementary Terms
   E. Presentation of Examples and Exercises

VI. Medical Terminology--18 Hours

   A. Word Building
   B. Drill Using Programmed Text
   C. Classroom Drills and Reviews

VII. Basic Human Anatomy--8 Hours

A. Introduction
B. Regions and Landmarks of the Body
C. The Brain
D. The Heart
E. Circulation
F. Tracheobronchial Tree
G. Gastrointestinal Tract
H. The Spleen
I. Kidneys
J. Endocrine Glands
K. Pelvis
L. Lymphatic System
M. Blood

VIII. Content of Medical Records--14 Hours

A. Requirements and Content of Each Type of Record
B. Special Records
C. Content of Medical Records

IX. Discharge Analysis--4 Hours

A. Daily Analysis of Hospital Service
B. Content of Medical Records
C. Practical Exercises

X. Hospital Statistics--11 Hours

A. What Are They?
B. How Are They Gathered?
C. What Information Is Needed by Whom?
D. Analysis of Hospital Service
E. Computations

XI. Ethics for Medical Records Personnel--1 Hour

A. Medical Record Librarian as a Profession
B. Code of Ethics
C. Role Playing

XII. Legal Aspects of Medical Records--2 Hours

A. Legal Aspects
B. Definitions
C. Purpose
D. Areas of Law to Be Considered

XIII. Standards and Requirements of State, Medicare, and Joint Commission--6 Hours

A. Certification and State Licensure
B. Medicare Survey
C. Physician's Responsibility for Good Medical Records
D. Joint Commission on the Accreditation of Hospitals

XIV. Education and Training--1 Hour

A. Changing Pattern of Medical Care
B. Educational Opportunities for Medical Record Librarians
C. Membership in American Association of Medical Record Librarians

XV. Data Processing--1 Hour

A. Punched Card Accounting
B. Need for Common Language in Medical Records

HOURS OF INSTRUCTION BY TOPIC AND WEEK OF INSTRUCTION FOR THREE WEEK TRAINING PROGRAM

Topics	1st Week	2nd Week	3rd Week	Total Hours
Hospital Organization and Community Role	2	0	0	2
Organization and Management of Medical Record Department	4	4	1	9
Basic Filing Systems	2	0	0	2
International Classification of Diseases and Operations or Standard Nomenclature of Diseases and Operations	4	6	6	16
Medical Terminology	8	10	0	18
Basic Human Anatomy	0	0	8	8
Content of Medical Records	4	6	4	14
Discharge Analysis	1	2	1	4
Hospital Statistics	1	4	6	11
Ethics for Medical Record Personnel	1	0	0	1
Legal Aspects of Medical Records	0	0	2	2
Standards and Requirements of State, Medicare, and Joint Commission	0	0	6	6
Education and Training	0	0	1	1
Introduction to Data Processing	0	0	1	1
Total Hours	27	32	36	95

HOSPITAL ORGANIZATION AND COMMUNITY ROLE

HOSPITAL ORGANIZATION AND COMMUNITY ROLE

I. Topic: Hospital Organization and Community Role.

II. Objectives:

A. To orient the student to the nature and organization of the hospital.

B. To orient the student to the role of the hospital in the community.

III. Activities and Procedures: Lecture.

IV. Materials and Bibliography:

Tapes of lectures available.

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V. Assignments: None.

HEALTH AS A COMMUNITY AFFAIR

I. What is a health care system?

A. A process which a person goes through to take care of health problems, e.g., seeing a doctor or a dentist.

B. A process which provides for people not seeking it, e.g., fluoridation of water, air pollution control.

C. In the care system are all kinds of hospitals, e.g., private, government.

1. All have different rules for physicians to follow.

2. There are great differences in small town hospital and large city clinic.

D. System provides educational opportunities for the growing number of health workers and professionals.

II. Health care system is complex.

A. Six basic areas are:

1. Doctors

2. Ambulance service

3. Preventive medicine

4. Manpower

5. Facilities

6. Services

B. A system is a set or arrangement of things so related as to form a unified or organic whole.

C. Education of health manpower is related to services, and services are related to facilities.

1. It is not a one-to-one relationship, but one of complex relationships.

2. As a system, the separate units have great potential.

3. Careful planning is required to insure that the system will operate.

4. A community hospital could provide the leadership needed to make the system work in a given geographic area.

III. Community hospital.

A. Could provide the leadership to make health care a community affair.

B. This is because the hospital is the hub of the community health care wheel.

C. The other parts of the system make up the spokes of the wheel so all must be operating for the system to work.

D. In addition to providing care for patients, the community hospital should have a comprehensive health care program for the community it serves.

1. New methods of financing health care are helping hospitals service communities, e.g., home health service and extended care outside of hospital.

2. Boards of directors are made up of people with only limited interest (political or social) in problem; hence, they are poorly informed about the changing role of the hospital.

3. Role of the hospital board is changing. It should look for new ways for the hospital to serve the community. It should be a social architect for the future of the hospital.

IV. A comprehensive program would guarantee the services of specialists and range beyond a single illness, and would include preventive care, maintenance of good health, rehabilitation of good health after illness.

A. Health services to be comprehensive must not be limited by geography, by ability to pay, and by social class. Accessibility and continuity are important components of a good system.

B. Group practice can provide an effective and efficient method of furnishing comprehensive medical care of good quality. This must include needed medical specialties and health services.

C. Need full range of health manpower, e.g., nurses, social workers, physical and occupational therapy, health aid service, nutritional service, laboratory support, specialists.

D. Must be able to draw upon every resource known to scientific medicine. In small communities there is a danger of duplicating experience and infrequently used facilities and personnel. Medical self sufficiency must be regionally based.

E. Must be able to deliver health care to anyone who needs it in the most efficient and economical manner.

V. Factors involved in comprehensive health care program

A. It is an individual responsibility for using health resources.

B. Community has collective responsibility for developing organized and continuing educational program. It is responsibility of personal physician to direct person to the integrated program.

C. Group practice of medicine is a way of integrating services of physicians.

VI. What is being done about planning?

A. Congress has passed bills promoting health planning.

B. We are beginning to look at health care as a whole. There is a concern with how various aspects of health care may be coordinated or integrated.

INTERNAL HOSPITAL ORGANIZATION

I. Personnel is key to good hospital administration.

  A. The more knowledgeable personnel are the better job is done.

  B. There is a need for good human relations.

  C. There is a need for good community relations.

II. Basic job of the hospital is to care for the sick.

  A. Regardless of size or kind, all hospitals have some things in common.

  B. There is a business side and a professional side to the operation of every hospital. Sometimes these are in conflict.

III. Types of hospitals.

  A. Government hospitals--federal and non-federal (36% of the hospitals).

  B. Voluntary, non-profit hospitals (50% of the hospitals).

  C. Proprietary hospitals are operated for profit.

    1. About 14% of the hospitals.

    2. Closed corporations--owned by doctors, etc.

  D. Short and long term hospitals.

    1. Short term hospitals where people spend only a few days or weeks.

    2. Long term hospitals which are for special problems, e.g., T.B. or mental cases.

IV. Administrative services of hospitals are broken into two areas.

  A. General services, such as, administration, maintenance.

  B. Special services like X-ray, laboratories, operating room.

V. Programs for hospital regulation.

   A. Joint Commission for Hospital Accreditation--hospital of over 25 beds.

   B. Licenses--issued by State Department of Public Health.

   C. Agencies approving schools:

      1. Nursing school

      2. Interns in residence

      3. X-ray technicians, etc.

VI. Governing boards of hospitals.

   A. Organization of the board varies with the type of hospital.

   B. Non-profit, voluntary community hospital has a Board of Trustees or Directors, members of which are not paid.

   C. Legal responsibility for operation of hospital rests here.

   D. Board makes policy for the hospital.

   E. The hospital administrator is charged by the board to put the policies into operation.

   F. Board has a number of committees to handle special problems; e.g., Executive Committee, Maintenance Committee, Finance Committee.

   G. Board operates on its own bylaws which are in its charter.

VII. Medical staff.

   A. They are concerned with the care of patients.

   B. They have their own governing boards and committees.

   C. Many hospitals have a joint committee to handle problems between medical staff and hospital administration.

VIII. Operation of hospital administration is broken down into departments.

- A. Medical Records is one department.
- B. Head of Medical Records is appointed by the hospital administrator.
- C. Even in a small hospital the work needs to be broken down into functional parts and assigned to different administrative areas.
- D. There should be job descriptions, written administrative procedures, recognized lines of authority, and lines of communication.

IX. Staff qualifications.

- A. There are certification requirements for hospital positions.
- B. All hospitals should be concerned with getting qualified people. This is a difficult problem because they offer only limited career potential.
- C. In-service programs are needed constantly to bring personnel up to qualifications and keep them there.

ORGANIZATION AND MANAGEMENT OF A MEDICAL RECORDS DEPARTMENT

HOSPITAL ORGANIZATION AND MANAGEMENT

I. Topic: Hospital Organization and Administration.

II. Objective: To provide some basic knowledge on organization and administration of hospital as it relates to the over-all management and operation and relationships between Board of Governors, Administration, Medical Staff, Departments, Employees, and Community.

III. Activities or Procedures: Lectures, discussion, questions and answers, tests, role playing, and problem solving.

IV. Materials, Resources, and Bibliography: Topic outline of lecture, own experience. Reading references--books and publications:

MacEachern, Malcolm T., Hospital Organization and Management--2nd Ed., Physicians' Record Co., Chicago, 1947.

Huffman, Edna K., Manual for Medical Record Librarians--5th Ed., Physicians' Record Co., Chicago, 1963.

HOSPITALS, Journal of American Hospital Association, Chicago.

Cunningham, Robert M., The Modern Hospital, McGraw Hill, Chicago, 1968.

Hospital Management (The News and Technical Journal of Administration), Chicago.

Film: "Department Manager," Mountain Plains Educational Media Council Film Catalog, University of Colorado, Boulder, 30 min.

V. Assignments: None.

HOSPITAL ORGANIZATION AND MANAGEMENT

I. The primary purpose for establishment of a hospital is for the proper care of the sick and injured. To do this the hospital must acquire and maintain the services of the medical profession, the nurses, and many other allied medical professional people and other administrative personnel while operating within clearly defined economic walls. This roll applies to all hospitals regardless of size or service. Economy is very important, however, the purpose for the hospital's existence, the proper care of the sick and injured, must be kept clearly in mind and the greatest efficiency in this area will never be sacrificed.

Organization, then, is the key to this highly complex operation of a hospital. When organization is defined, management of the functions of the hospital will follow. Authority must be centralized and responsibilities and duties of all employees must be clearly defined.

A. Governing Board.

1. The Governing Board is the guiding hand and rule of a hospital. This Board may also be known as Board of Trustees or Board of Directors.

2. The main purpose of the Governing Board is to oversee proper care of the sick and injured at the lowest cost without losing efficiency. To do so the Governing Board delegates authority to the Hospital Administrator or Hospital Director as he may be known.

3. The size of the Governing Board should be determined to meet the needs of the community. The members should be carefully chosen and should be those who are dedicated to the welfare of the community and its citizens. For many obvious reasons it is felt best not to have a member of the medical staff on the Board.

4. The main responsibilities of the Governing Board are:

   a. Selection of competent personnel.

   b. Control of hospital funds and resources.

   c. Maintenance of suitable physical facilities.

   d. Development of policies for guidance of medical staff and other personnel.

5. The Governing Board generally meets once a month and can assemble for special meetings when necessary.

B. Hospital Administrator.

1. The Governing Board, responsible for the entire hospital and for all actions taking place within, delegates authority directly to the Administrator. The Administrator must carry out duties the Governing Board has given to him and report all results back to the Board. Because of the highly responsible position in which the Administrator finds himself, the Governing Board must give him full and complete authority to coordinate activities of the entire hospital.

2. The Administrator has the following specific duties:

   a. See that policies laid down by the Governing Board are carried out.

   b. Coordinate activities of the medical staff and personnel of the departments.

   c. Coordinate all efforts of departments for better patient care.

   d. Provide proper facilities and equipment necessary to departments.

   e. Be responsible for good employer-employee relationships.

   f. Maintain a good relationship between hospital and the community.

3. The Hospital Administrator must be a good leader, interested in the community and be able to inspire his hospital staff to provide the patient with quality care.

C. Medical Staff.

1. The Medical Staff, as with all the departments of the hospital, is concerned primarily with the best possible care and service to the patient. It is, however, also concerned with education of the staff, paramedical groups, and the entire community.

2. The Governing Board must determine whether the Medical Staff is to be the open or closed type.

   a. In an open staff hospital any licensed physician in the community may bring patients to the hospital.

   b. In a closed staff hospital only those physicians on the active or associate staff may bring patients to the hospital for treatment.

3. Appointments of the Medical Staff are made at one, two, or three year intervals by the Governing Board. The time of the appointment will vary according to size and mission of the hospital.

4. Medical Staff organization deals primarily with defining duties and responsibilities of its members. It provides for discussion of patients and exchanges of thoughts concerning various types of treatments for patients. Staff members may grow both professionally and ethically. It also provides educational means for residents, interns, nurses, and other groups and promotes good relationships with other hospital personnel.

5. The Medical Staff finds need to review the quality of its own work through some type of audit. This is accomplished for the sake of the patient and for education and not merely for criticizing individual performance or capabilities.

6. Finally, the medical staff is responsible for conducting as much research work as can be done.

7. The Medical Staff generally selects its own officer or chairman. Very often this officer is designated as Chief of Staff of the hospital.

8. Regular staff meetings are held throughout the year.

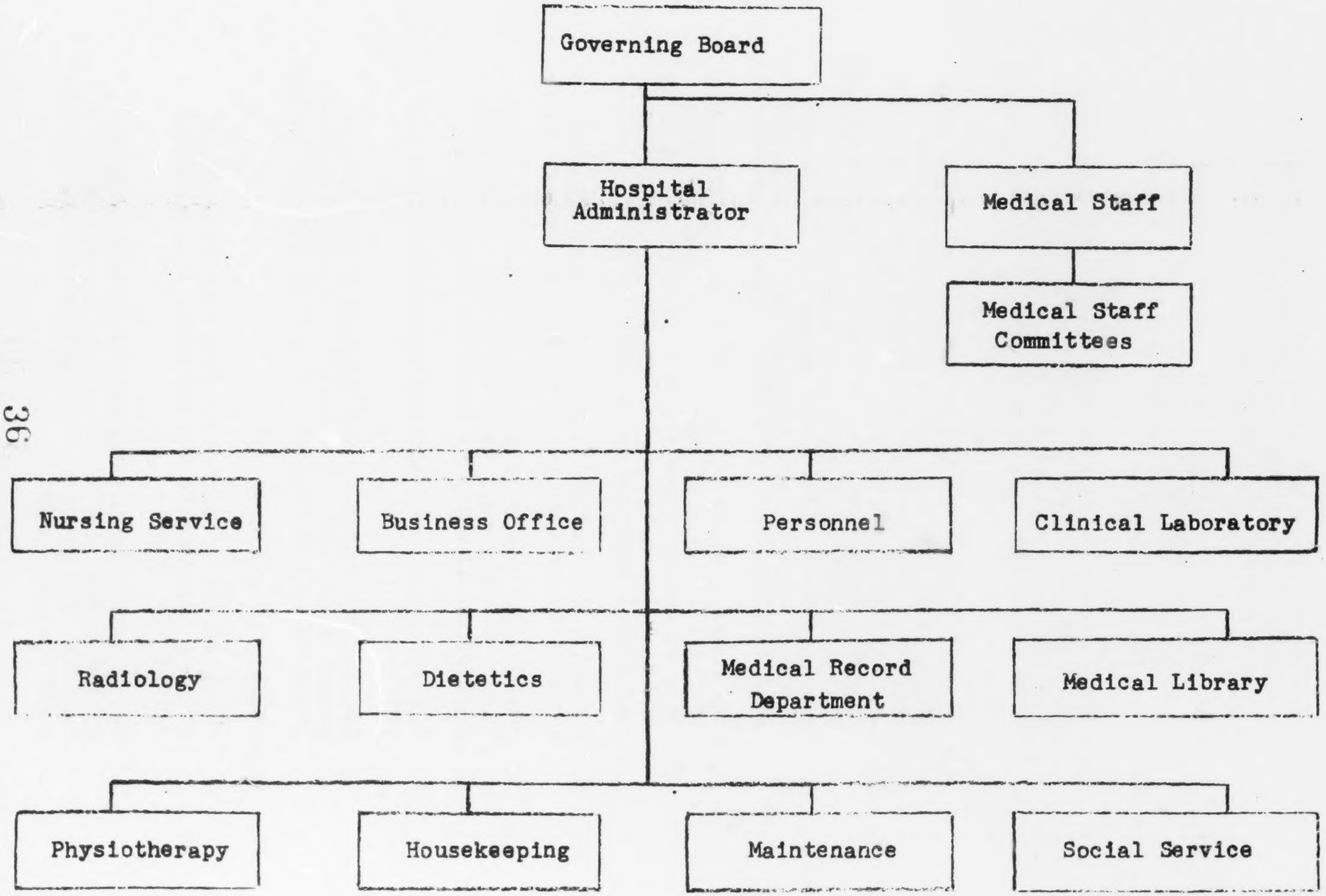
9. Bylaws developed by the Medical Staff itself govern this body. The Staff, too, must enforce these rules and regulations within its own ranks.

D. Departments of the Hospital.

1. The hospital of course couldn't exist without all the departments and services that function within its walls.

2. The Hospital Administrator has chosen each department head and expects this supervisor to organize and manage his department to the best possible advantage.

ORGANIZATION OF HOSPITAL


Governing Board
Hospital Administrator
Medical Staff
Medical Staff Committees
Nursing Service
Business Office
Personnel
Clinical Laboratory
Radiology
Dietetics
Medical Record Department
Medical Library
Physiotherapy
Housekeeping
Maintenance
Social Service

3. All departments will vary somewhat in functions, number of personnel, and organization according to size of the hospital. In a large hospital several employees might perform one function, while in a small hospital an employee probably will perform several functions. It is also possible that several departments be combined in a small hospital, however, the same delegation is given to the supervisor by the Administrator and this supervisor is responsible to the Administrator.

4. Again, the primary purpose of each and every department is to provide proper care to the sick and injured.

E. Organization Chart (hospital).

Students will be asked to assist instructor in developing an organizational chart. This will be done together as a class project. A chart will be placed on the overhead projector, revealing a step or part at a time. The students will be given a copy of a proper chart when we are finished.

II. Medical Staff Committees.

Because the Governing Board is usually a lay board and the Administrator is also a layman, the Medical Staff not only must create its own rules and regulations, but must evaluate its members' professional qualifications, worthiness of staff appointment, measure the quality of care rendered and appraise care given patients by all departments and services throughout the entire hospital. To accomplish all these goals effectively a number of standing committees have been set up, with representation of administration and the Medical Staff on some committees and strictly Medical Staff representatives on others. Special committees may also be established as needed. Also, several committees or all committees may be combined depending on size of the hospital.

A. Executive Committee.

1. The Executive Committee should be comprised of the president of the Medical Staff and three other members of the active staff. These members are elected at the annual staff meeting.

2. This Committee should meet monthly and maintain a file of recorded minutes.

3. The duties of this Committee are to coordinate all activities and policies of the departments, and act upon reports of the medical record, tissue, and other committees as directed by the staff. All power of this Committee is delegated by the Medical Staff.

B. Credentials Committee.

1. The Credentials Committee usually consists of seven members of the consulting or active staff, representing all major specialties.

2. Meetings of the Committee are called by the chairman.

3. The principle duties of this Committee are to review credentials of the applicants for medical staff membership; investigate any ethical problems resulting in the medical staff; to review any reports and records referred from the executive, medical record, or tissue committees and make decisions concerning staff members or refer the problem to the entire medical staff. The Committee also reviews information concerning competence of staff members and recommends appointments, privileges, and reappointments.

C. Joint Conference Committee.

1. The Joint Conference Committee is comprised of three members of the Governing Board, three members of the Medical Staff, and the Administrator.

2. The Committee usually meets on call of the chairman.

3. This Committee acts as liaison between the Medical Staff and the Governing Board, promoting better understanding and cooperation between these two bodies. The duties of the Committee are to advise on hospital problems, to interpret reports of medical activities to the Board, and to promote mutual discussion of recommendations made by the Medical Staff to the Governing Board.

D. Medical Record Committee.

1. The Medical Record Committee should be comprised of at least three members of the active staff. More members can be appointed to represent specialties according to the needs of the hospital.

2. The Committee meets monthly and submits a copy of proceedings to the executive committee.

3. The duties of the Committee are to review medical records to insure compliance with required standards. This is a very important committee to the Medical Record Department and perhaps will involve the Department's services more than any other committee. Usually the Medical Record Librarian acts as secretary to this Committee and assists in any other way possible to speed the review and appraisal of medical records.

E. Medical Audit Committee.

1. The Medical Audit Committee usually consists of the chairman and members of the Medical Staff representing the various specialties.

2. This Committee meets monthly and may be combined with the Medical Record Committee.

3. Duties of the Committee are to check preoperative and postoperative diagnoses, pathological diagnoses, and X-ray findings and the results at the time of discharge of the patient as justifiable, not justifiable, or inevitable. Because the Committee may not be able to screen all records of discharged patients the Medical Record Librarian can greatly assist this Committee by completing a medical audit sheet or card on each record of a discharged patient. However, if this is done, these records of the work of the physicians should be kept in a private file and be made available only to the Governing Board through the Administrator, and to the Credentials Committee when necessary. These reports are not part of the patient's record and should not be filed as such.

F. Infection Committee.

1. The Infection Committee usually consists of a chairman who will act as infection control officer for the hospital, plus a member from the medical staff, surgical staff, and nursing service. The Medical Record Librarian may or may not be actively involved in the Committee.

2. The Committee meets once a month.

3. Duties of this Committee are to investigate all hospital acquired infections, medical and postoperative following clean surgery. The Committee also is responsible for the environmental health of the patients and employees and for education of the hospital staff in infection prevention.

G. Tissue Committee.

1. The Tissue Committee usually consists of the pathologist, chiefs or representatives of the major surgical specialties, and two members of the Medical Staff.

2. This Committee meets once a month and submits a copy of proceedings to the Executive Committee.

3. The duties of the Committee are to review preoperative diagnoses and pathological diagnoses of tissue removed at operation in light of agreement or disagreement. Results are reported to the Executive Committee or the entire Medical Staff.

H. Utilization Committee.

1. The Utilization Committee usually consists of representatives of the medical and surgical specialties. The number of members will vary according to size of the hospital.

2. This Committee meets every month.

3. Duties of the Committee are to study medical records while reviewing reasons for admission of the patient, necessity of admission, diagnoses, any resulting complications, actual length of stay and justification of length of stay. The Utilization Committee is one of the newer committees and has come into being in the last several years with the advent of Medicare. Actually, necessity of hospitalization and length of stay was studied in the Medical Record Committee, but more emphasis has been placed on length of stay and proper utilization of all hospital facilities. This Committee may be combined with another, such as the Medical Record Committee.

III. Interdepartmental Relations.

A. To understand relationships of departments of an organization we must first understand the functions of the organization.

1. We have just discussed the organization of the hospital, medical staff, and committees of the medical staff. We have also stated that the hospital exists and functions for proper care of the sick and injured.

2. Another important function of the hospital is to act as an educational center for further training of physicians, nurses, medical technologists, X-ray technicians, dietitions, medical record librarians, etc.

3. Another function of the hospital is to promote medical research. You may think that very little research is conducted in small hospitals but merely day-to-day treatment of patients does constitute research. With further standardization of hospital terms, statistics, and development of mechanized systems, more research is and will be done in the future.

B. It is the responsibility of the hospital administrator to coordinate the operations of all the departments of the hospital for a smooth-running organization. Although he may not know all the detailed functions of each department of medical specialty, he must channel all efforts of the departments and services into the best possible care of the patient. Because the administrator can not personally direct each department, he delegates responsibility to the department heads to carry out hospital policy established by the governing board and to carry out proper functions of the department.

C. Then, too, there must be a spirit of cooperation between the medical staff and all departments of the hospital. While the physician is ultimately responsible for the medical record, many reports compiled are either originated or completed by other departments. The medical staff has a particularly close relationship with the medical record department. The medical record department then has many contacts with the medical staff. The medical record committee probably serves as best liaison between the medical staff and the department. Many problems can be solved by maintaining a good working relationship between the medical staff and the medical record department through this committee. The medical record librarian usually is involved in other staff committees also, as medical audit, tissue, infection, utilization, and credentials committees.

D. To exist harmoniously with other departments, it is necessary for us to have a fairly good understanding of functions and responsibilities of the other departments. We should have an over-all picture of the hospital organization and the position of each department in the picture.

E. Discussion of Departments.

1. Admitting Department.

   a. Because the origin of the medical record rests with the Admitting Department, a good relationship and understanding with this department must exist. Accuracy of data taken from patients, including correct spelling and correctness of admission lists originating in the admitting department is very important. However, the admitting department usually is under tension and the patient may be anxious and apprehensive about his admission.

   b. The medical record librarian must understand that it is difficult to obtain all necessary information and the admitting department supervisor must realize that accuracy of names and hospital numbers is necessary for complete and accurate medical records. Here, understanding and appreciation of each department's problems will result in better cooperation.

2. Nursing Service.

   a. To reflect good nursing care carefully written nursing notes in the medical record are necessary. Recording should be done promptly and accurately, with elimination of unnecessary detail. Of course, the nursing personnel are extremely busy in care of patients. It is good for us to remember that; however, it is the nursing service's responsibility to complete that portion of the medical record promptly.

   b. Usually, nurses aren't familiar with the functions of the medical record department. The medical record librarian may have an opportunity to speak to the nurses or student nurses concerning proper recording and need for good nursing notes, particularly for medicolegal reasons.

3. Clinical Laboratory and Pathology.

   a. All reports of laboratory work done for the patient will come from this department. Reports should be sent to the ward promptly but as some reports must be held because results are not available these reports may not accompany the record from the ward if the patient is discharged before all results are filed with the record.

b. Pathology reports may also be late in some instances. The medical record librarian may think that too many pathology reports are being filed after discharge of the patient and this may be true. Mutual understanding and cooperation between the two departments will alleviate additional problems.

c. The laboratory should also maintain a control for prompt completion of the autopsy report. The physician may not want to sign the medical record as completed until the autopsy report is filed.

4. Surgery and Anesthesiology.

   a. The responsibility for the operative report rests with the operating surgeon. Dictation of this report should be done immediately following the operation. Usually dictation is done by machine recording, but the surgeon must approve and sign the report after it has been transcribed.

   b. The anesthesia record is begun before surgery and completed following surgery. Cooperation is generally good between surgery, anesthesiology, and the medical record department.

5. X-ray or Radiology Department.

   a. X-ray reports are completed and then signed by the radiologist. Most of the reports reach the ward and are filed in the record before the patient is discharged. Usually, cooperation between this department and medical records is good and no problems exist.

   b. In small hospitals, however, the radiologist may not be available to interpret X-rays each day. This may result in a filing problem but through discussion a solution can be reached.

6. Physiotherapy Department.

   a. If such a department exists, reports concerning treatment, condition, and response of the patient to treatment should be completed and signed by the therapist.

b. Reports are filed with the record. Generally, no problems exist in this area.

7. Dietetics.

   a. When special diets are prescribed or the physician has requested a consultation with the dietition, a report will be completed and signed by the dietitian and filed with the medical record.

   b. Problems seldom exist between this department and the medical record department.

8. Medical Library.

   a. In some hospitals the medical library may be combined with the medical record department. This combination can work to great advantage of the medical record librarian. She may be able to point out certain references in connection with cases in the hospital, thus promoting prompt completion and improvement in the quality of medical records.

   b. If the departments are separate, an interrelationship can still exist through use of resource material and medical records.

9. Business Services--Accounting, Purchasing, Supply.

   a. The medical record department will have some contact with the accounting department, purchasing and supply department.

   b. There is a certain amount of budget responsibility in which the medical record librarian or department supervisor will be involved. Pay checks and time and attendance records must be checked periodically.

   c. New equipment or changes of equipment must be discussed. It is quite possible that the purchasing agent may be able to assist the medical record librarian in requisition of the most appropriate equipment for the department.

   d. The need for other supplies as typewriter ribbon, record forms, etc., never ends. It is necessary to cooperate by requisitioning supplies at a given time of the month and by keeping special requests to a minimum.

10. Maintenance and Housekeeping.

    a. We should always be interested in keeping the department in good condition. Most of the cleaning and upkeep is done by the housekeeping department.

    b. All needs for maintenance as painting and repairs should be reported to proper authorities. Many times safety hazards result because small repairs are overlooked.

    c. The medical record librarian may come into contact with others in the daily routine. All problems concerning another department should be fully discussed and some understanding or solution reached. Always keep the welfare of the patient and rendering the best care possible to him in mind when a conflict with another department exists.

IV. Film or Film Strip.

V. Re-cap of Session (2 Hours).

   A. The primary purpose for establishment of a hospital is for the proper care of the sick and injured.

   B. The governing board is the ultimate rule of a hospital.

   C. The hospital administrator, receiving all authority from the governing board, is responsible for all activities within the hospital.

   D. The medical staff, primarily concerned with proper care of the sick and injured, is also concerned with education.

   E. All departments of the hospital exist primarily for care of the patient.

   F. Committees of the medical staff are created to evaluate members' professional qualifications, worthiness of staff appointments, and to measure the quality of care rendered to the patient.

   G. The efforts of all departments in the hospital must be channeled into the best possible care of the patient.

   H. The medical record department must exist harmoniously with all departments of the hospital.

ORGANIZATION AND MANAGEMENT OF MEDICAL RECORD DEPARTMENT

I. Topic: Organization and Management of Medical Record Department

II. Objective: The objectives of this lesson are to acquaint the student with organization and management of the medical record department. To do so, we will first study hospital organization, organization of medical staff and staff committees, and interdepartmental relationships. We will then study the organization of the medical record department including responsibility and place of the department in relation to the hospital as a whole, responsibilities of the medical record librarian, operations performed in the department, selection, training, and supervision of personnel, layout of department, physical location, and equipment utilized. The student will be given time for discussion of these items. At the end of the session, the student should have acquired basic understanding of hospital and medical record department organization.

III. Activities or Procedures: Lectures, discussion, field trip, role playing, questions and answers, tests.

IV. Materials, Resources, and Bibliography: Lecture outline, hospital facility, references:

Air Force Manual 50-20, Guide for Supervisors, Department of the Air Force, Washington, D.C., 1955.

Air Force Manual 25-1, The Management Process, Department of the Air Force, Washington, D.C., 1954.

American Hospital Association, Guide to the Organization of a Hospital Medical Record Department, AHA, Chicago, 1962.

Bachmeyer, Arthur C., The Hospital in Modern Society, The Commonwealth Fund, New York, 1943.

Goldwater, Sigismund S., On Hospitals, The Macmillan Co., New York, 1947.

Huffman, Edna K., Manual for Medical Record Librarians--5th Ed., Physician's Record Co., Chicago, 1963.

MacEacher, Malcolm T., Hospital Organization and Management, Physician's Record Co., Chicago, 1957.

V. Assignments:

Guide to Organization of a Hospital Medical Record Department, American Hospital Association, Chs. 1, 2, and 6.

Manual for Medical Record Librarians, Huffman, Ch. XV.

ORGANIZATION AND MANAGEMENT OF MEDICAL RECORD DEPARTMENT

As all other departments that comprise a hospital are established for proper care of the sick and injured, so specifically does the medical record department exist. Quality of patient care is measured through the adequacy of the medical record. This department must be managed in the best possible way to insure the most efficient care of the patient, but with minimum effort and cost to the hospital as a whole. The basic elements of management employed by the supervisor are planning and controlling. To do this we must first determine the functions of a specific department and the personnel necessary to perform these functions. The following questions might be asked: who? what? how? when? and why?

I. The functions of the medical record department are a series of operations which are characteristic of that department.

A. These are: medical record analysis, coding and indexing, releasing information, proper completion of insurance forms, developing statistics, maintaining required indexes, filing records in an accessible manner. After we have defined the functions we then may think in terms of personnel to perform these functions. It is important that the supervisor fully understand the relationship of one operation to another and that each employee have a basic understanding of how he fits into the department and ultimately in the organization of the entire hospital.

B. The true function of the medical record department is to assure medical records with sufficient data written in sequence of events to justify the diagnosis and warrant the treatment and end results.

C. Medical records must be established for all patients treated and kept in an accessible manner for:

1. Patient--present and future treatment.
2. Hospital--as a tool for developing statistics, to measure the quality of patient care, and for any medicolegal needs which may develop.
3. Physician--for future treatment of the patient and as a tool to measure the quality of patient care.
4. Research and education--for physicians, nurses, students, and other qualified personnel.

II. As organization is the tool of effective management, the department supervisor must be aware of principles of good management. In other words we must organize before we are able to manage.

A. According to Webster's Dictionary, College Edition, to organize is to provide with an organic structure, systematize, to arrange, establish, institute, to bring into being.

B. The four types of organization usually found are:

1. Line organization--authority begins at the top and flows to subordinates departmentally.

2. Staff organization--authority begins at the top and flows through functions.

3. Line and staff organization--a combination of these two.

4. Functionalized organization--control is maintained by the executive within his specialized field.

C. We are concerned with functionalized organization in the medical record department. The medical record librarian then or qualified supervisor generally controls all functions of the department.

III. In Webster's Dictionary, College Edition, we find to manage is to handle, control, guide, to have charge of, to direct, conduct and administer. Effective management may also be called good leadership.

A. The department supervisor must manage his department in accordance with policies established by the hospital administrator.

B. By providing good leadership the supervisor will insure that the functions of the department will be carried out by the employees in a unified manner, working for the common good of service to the patient.

IV. Usually the medical record librarian is on the second level of management, that is, he reports directly to the hospital administrator. Authority, flowing downward, is delegated to the medical record librarian from the administrator, while responsibility for performance of the department flows upward, from the medical record librarian to the administrator.

A. The medical record librarian must be able to plan, organize and control his department. He must decide whether each employee has too much or too little to do and be sure all assignments given are clear. He must capture the respect of the departmental employees and create a relationship of cooperation and willingness. He must always look at the operations of the department in light of any improvements which would create greater efficiency.

B. He must be able to analyze a medical record and know the component parts and be able to refer this record to the proper sources or committee for corrective action if necessary. He must know and understand the minimum requirements concerning medical records set down by the hospital accrediting agencies and if deficiencies exist he must know how to rectify the situation. He must cooperate fully with the medical staff and the medical staff committee in improving the medical record program of the hospital.

C. The following excerpt is taken from Guide for Supervisors, AFM 50-20, Department of the Air Force:

Are You a Boss or Leader

1. A boss creates fear--a leader creates confidence.
2. "Bossism" breeds resentment--leadership breeds enthusiasm.
3. A boss says "I"--a leader says "we."
4. A boss fixes blame--a leader fixes mistakes.
5. A boss knows how--a leader shows how.
6. "Bossism" makes work drudgery--leadership makes work interesting.
7. A boss relies on authority--a leader relies on cooperation.
8. A boss drives--a leader leads.

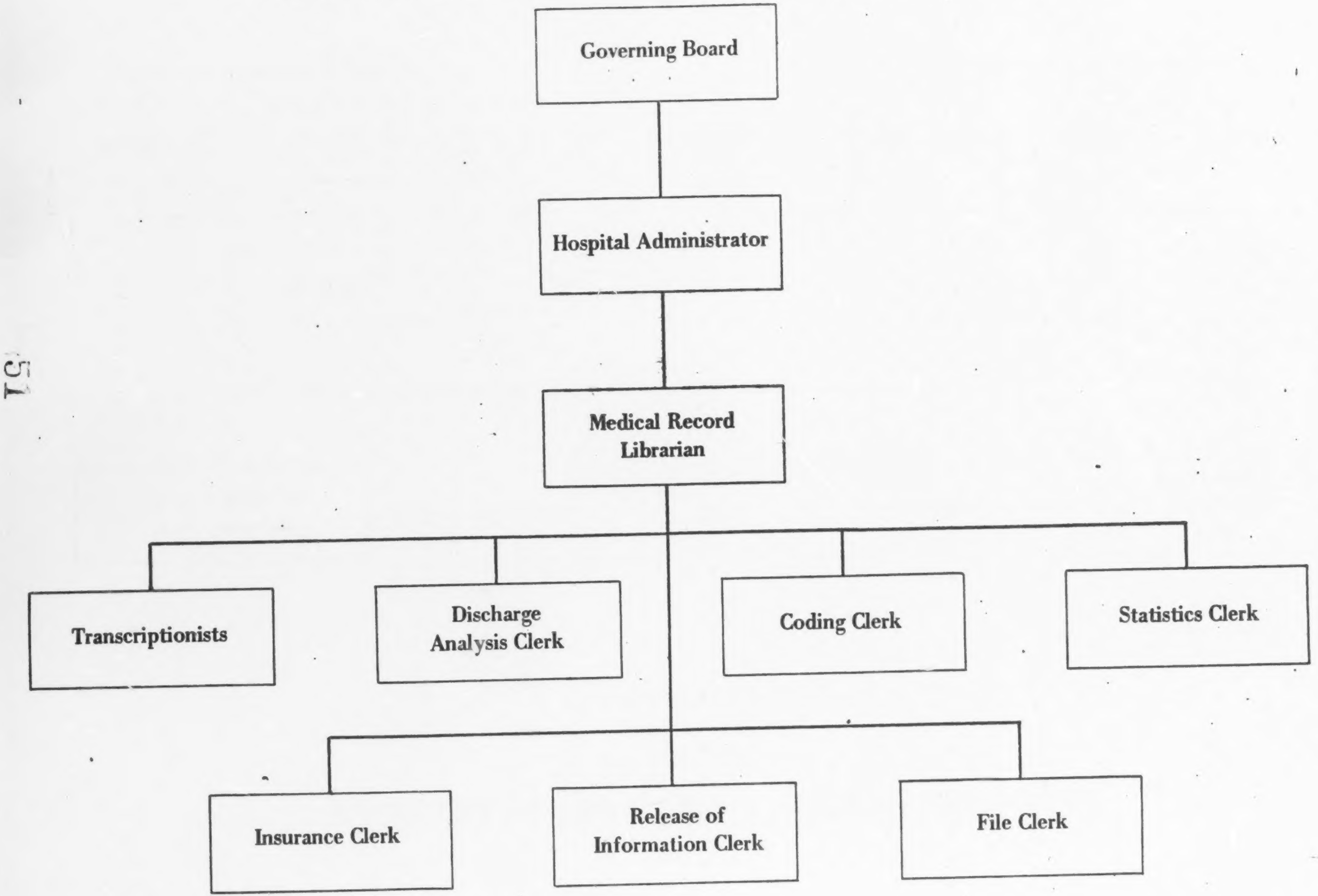
V. An organizational chart is very valuable in defining structure of the department by position or employee or by functions performed. Immediately employees see where they stand in the organization and how their duties relate to the organization of the department as a whole.

A. An organizational chart may be prepared by position.

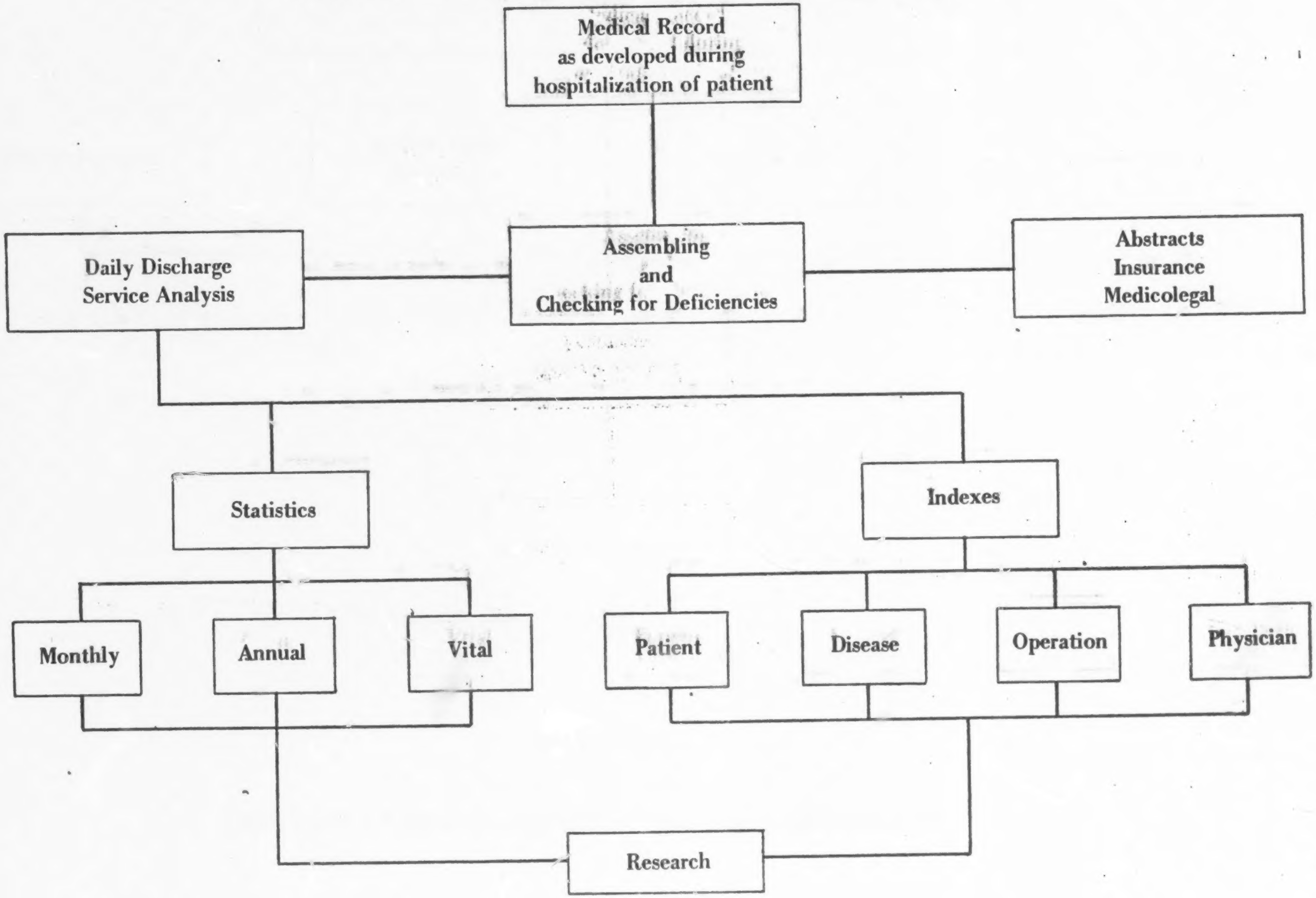
B. An organizational chart may be prepared by function. The functional chart can be based on job titles of the personnel or by functions performed by the personnel. Because our training course is geared to those working in small hospitals a chart listing functions would be more meaningful to you. In most hospitals one employee will perform more than one function.

C. The organization chart or charts could be hung in the department or made available to personnel in other ways.

ORGANIZATION OF MEDICAL RECORD DEPARTMENT

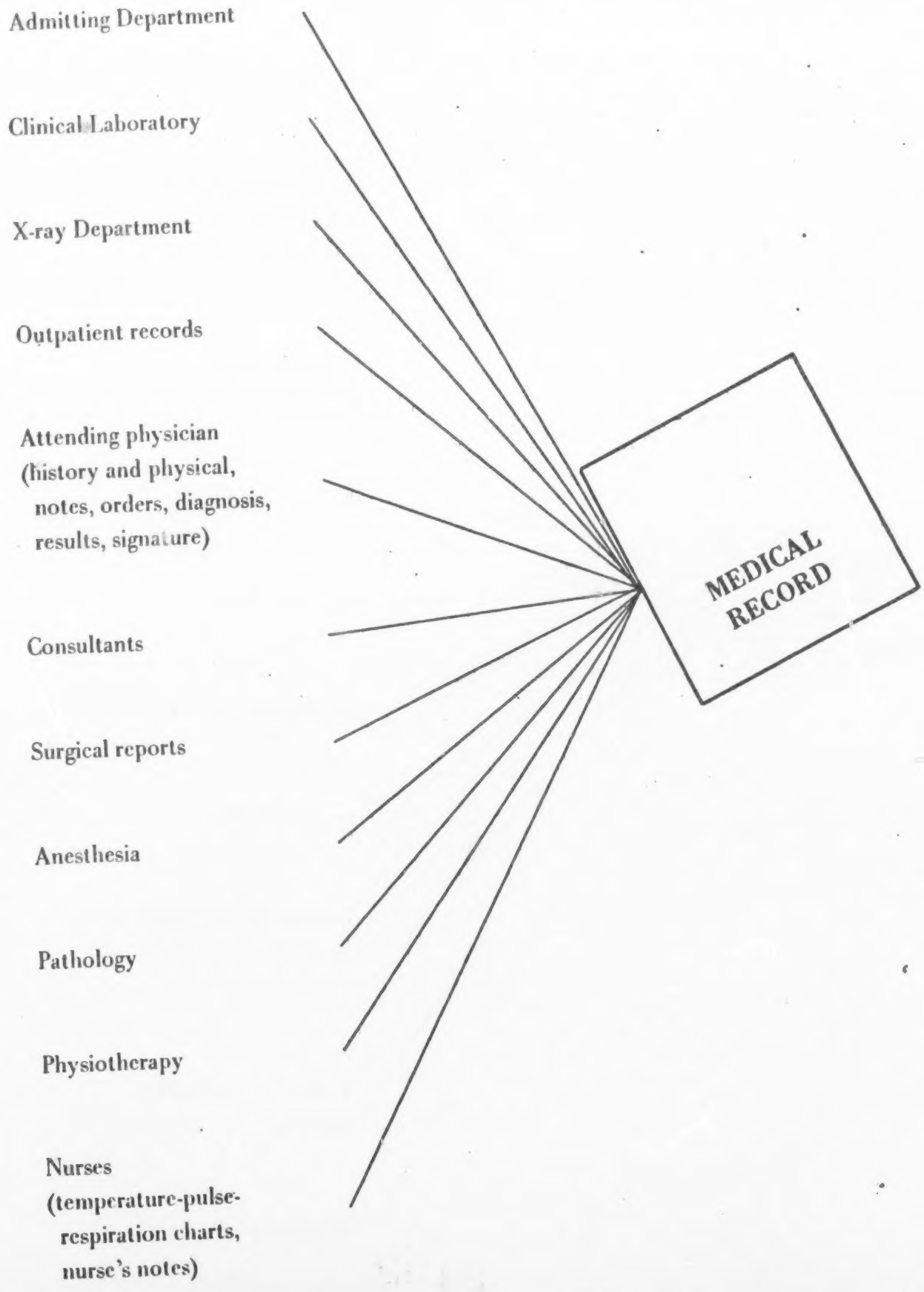

Governing Board
Hospital Administrator
Medical Record Librarian
Transcriptionists
Discharge Analysis Clerk
Coding Clerk
Statistics Clerk
Insurance Clerk
Release of Information Clerk
File Clerk

FUNCTIONS OF THE MEDICAL RECORD DEPARTMENT


Medical Record
as developed during
hospitalization of patient
Daily Discharge
Service Analysis
Assembling
and
Checking for Deficiencies
Abstracts
Insurance
Medicolegal
Statistics
Indexes
Monthly
Annual
Vital
Patient
Disease
Operation
Physician
Research

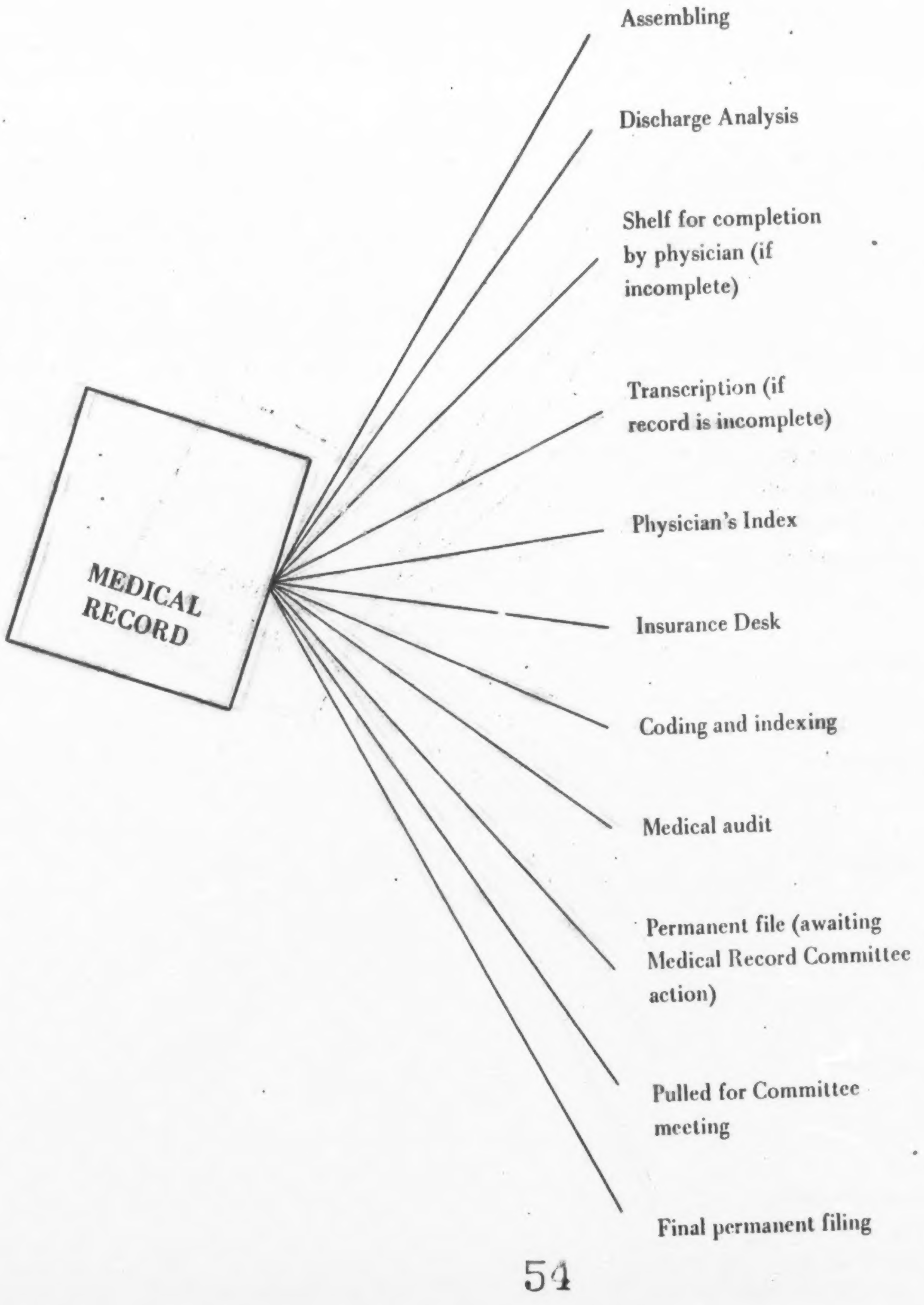
FORMS FLOW CHART

ROUTE OF COMPONENT PARTS OF THE MEDICAL RECORD PRIOR TO DISCHARGE OF THE PATIENT


Admitting Department
Clinical Laboratory
X-ray Department
Outpatient records
Attending physician (history and physical, notes, orders, diagnosis, results, signature)
Consultants
Surgical reports
Anesthesia
Pathology
Physiotherapy
Nurses (temperature-pulse-respiration charts, nurse's notes)
MEDICAL RECORD

WORK FLOW CHART

ROUTE OF THE MEDICAL RECORD AFTER DISCHARGE OF THE PATIENT


MEDICAL RECORD
Assembling
Discharge Analysis
Shelf for completion by physician (if incomplete)
Transcription (if record is incomplete)
Physician's Index
Insurance Desk
Coding and indexing
Medical audit
Permanent file (awaiting Medical Record Committee action)
Pulled for Committee meeting
Final permanent filing

VI. Every employee appreciates a smooth-running department in which work flows freely from one operation to another. Work seems to stem from everywhere in the medical record department as some operations tend to move faster than others.

A. Straight-line flow of work is considered to be best, however, it is almost impossible for all work to remain in a straight line.

B. It might be well to study the work flow to determine whether one employee has too little or another too much, or where certain operations could be shifted for a smoother flow. A study might also point up the fact that better approaches to the work load might be made or more accepted standards for completing the work might be instituted.

C. We probably have all heard of work simplification at one time or another. Perhaps it can be defined as finding the mid-point between too much work or effort and too little work or effort. Sometimes we get so involved in minor details of an operation we miss the major functions. Then we might say that this is the way the job has always been done, why change it now. Things are changing very fast though, and what we considered a vital statistic or a necessary bit of information yesterday may be superfluous today.

1. To try work simplification technique choose a particular operation that you feel needs to be studied and improved.

2. Then write down the steps of the job.

3. Ask yourself if all the steps are necessary.

4. Place the operation at the desk you feel would be the most logical in the department.

5. Choose the best method you find in completing the job and adopt it.

VII. Before we can analyze a job we must know that a job may be defined as an operation or series of operations performed by one employee.

A. Requirements for the particular job are stated as well as the qualities and skills the worker must possess to perform the duties of the job. A job analysis will point out the elements necessary for the completion of the job and also point out the unnecessary elements.

B. The job analysis is very helpful in hiring, training and promoting personnel.

JOB DESCRIPTION

OCCUPATION: Supervisory Medical Record Clerk.

SUMMARY: Works under the supervision of the hospital administrator. She is guided in her functions by the Medical Record Committee and a consultant medical record librarian, if available.

WORK TO PERFORM: Using initiative and independent judgment and having a thorough knowledge of work involved, performs any or all of the following duties:

1. Assures that all medical records are accounted for by checking daily patient census.
2. Assembles medical records of discharged patients in proper order.
3. Quantitatively analyzes the component parts of medical records to insure completeness and accuracy according to the requirements of the accrediting bodies. If discrepancies exist, completes a deficiency check list and returns record to physician concerned. If case remains questionable, after reevaluation refers record to Medical Record Committee for final decision.
4. Prepares daily, monthly, and annual statistical reports based on discharge analysis.
5. Transcribes dictated medical reports to be incorporated with medical record. May also be required to transcribe medical correspondence for physician.
6. Abstracts, from medical records, information for release to insurance companies, other hospitals, and physicians. She must apply a good working knowledge of what is appropriate for release and which records are not for general knowledge.
7. Assigns appropriate diagnostic and operative codes from either the Standard Nomenclature or the International Classification of Diseases Adapted.

8. Maintains the following indexes:

   A. Patient Index (Master File)
   B. Disease Index
   C. Operative Index
   D. Physicians' Index

9. Maintains a filing system which assures rapid location of records.

10. Be familiar with the objectives and functions of the Medical Record Committee, and be prepared to assist and have available medical records for review and any other necessary information.

11. May be required to coordinate the medical record department and the medical library.

DESCRIPTION OF PERSONAL REQUIREMENTS:

1. Requires good memory for a quantity of detailed work.

2. Requires good working knowledge of hospital medical records and the significance of accurate records.

3. Must be aware of and practice ethics, including medico-legal aspects, involved in the handling of all medical records.

4. Must be able to type 60-70 words a minute accurately.

5. Must be able to file accurately, whether it be numerically or alphabetically.

6. Shorthand is desirable but not a requirement for this position.

7. Must possess a well-rounded personality, ability for leadership, persistency, accuracy, cooperativeness, progressiveness, persuasiveness, decisiveness, and good judgment.

DUTIES OF EMPLOYEE 1 or MISS A

1. Daily analysis of records of discharged patients.
2. Quantitative analysis of medical records.
3. Physicians' index.
4. Insurance reports.
5. Monthly and annual statistical reports and special reports.

DUTIES OF EMPLOYEE 2 or MISS B

1. Transcription.
2. Correspondence.
3. Committee minutes.
4. Coding and indexing.
5. Telephone.

C. The department supervisor is also able to determine the scope of work to be accomplished and can evaluate the relationship of each individual analysis to the entire departmental organization.

VIII. After job analysis has been done we are able to write a job description.

A. A job description is that part of the job analysis which provides the specifications required of the worker based on opinion supported by fact and required for ideal job performance.[1] This description gives the qualifications necessary for performance of the job as based on elements of the job.

B. Several steps to remember in writing job descriptions are:

1. List skills involved as typing, shorthand, or technical skills.
2. List work as filing, posting, statistical reports, and correspondence.
3. Supervisory control over others, if any, and supervisory control over this position.
4. Knowledge of rules and regulations and particular guides which the employee must use in performance of duties.
5. Separate the duties and responsibilities from supervisory control over position and other significant facts as knowledges, person-to-person relationships.
6. Describe duties in an accurate, brief, specific, factual, and simple language.

IX. After a work flow of some sort has been established and job operations have been determined and simplified, we should now think in terms of describing each operation by writing the steps down from start to finish. This compilation is called a procedure manual.

A. A procedure manual is a guide for performing a particular job in the department. A definite procedure should be written for each operation performed and all procedures should be combined in a manual and a copy of the manual should be given to each employee.

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[1] Huffman, Edna K., Manual for Medical Record Librarians--5th Ed., Physician's Record Co., Chicago, 1963.

INSURANCE REPORTS

PURPOSE: To provide pertinent data to the various insurance companies notifying them of the discharge of their insureds after hospitalization in ______________ Hospital. The information this company requires will accompany the statement of expenses of their insureds incurred during their hospital stay.

MATERIALS NEEDED:

1. Insurance forms and statements from business office.
2. Completed charts of discharged patients.
3. Typewriter.
4. Envelopes.

PROCEDURE:

1. Sort forms if you usually have more of one kind than others, as Blue Cross.
2. Check all forms to see that the authorization has been signed by the patient. (Authorization for release of information) If authorization hasn't been signed, this will have to be obtained before the insurance form is completed.
3. Place form in typewriter. A carbon should be typed unless a copy machine is available.
4. Complete form, typing in required information referring to the medical record. These forms vary and if any doubts exist contact the attending physician before completing the form.
5. Address an envelope unless the company has provided one.
6. Type your initials or name on the carbon and file this or a photocopy with the record.
7. Insurance form is then ready for the physician's signature.
8. Place insurance form to be signed in appropriate physician's box.
9. After signature has been affixed, form and hospital bill are mailed to the respective insurance company.

B. A procedure manual can be an invaluable tool for everyday performance of all functions of the department and for training new personnel. If each employee performs his job according to the defined procedure it will be easier for the supervisor to judge performance of the employee.

C. The carefully adhered to manual will also result in a uniformity of the entire department.

D. The procedure manual will then be used primarily as a teaching method.

E. All procedures should be stated clearly and specifically. Never assume that the employee will know part of the procedure. Write out the entire operation from start to finish.

F. Procedure manuals may be written quite elaborately with title page, index, and may include policies and hospital regulations. A procedure manual written for one hospital will not fit in another. Whether simple or elaborate, the important thing to remember is to state all procedures as briefly as possible and tell the employee what he is to do and how he is to go about doing it.

G. You may also want to include job listings, as, Employee Number 1 is responsible for the following operations or jobs. Since all employees have a copy of the manual they will have a good idea of what each one is doing and how they fit into the organization.

H. When writing or revising the manual, enlist the help of the employee involved with the particular job. This will result in better participation and interest.

I. The procedure manual must be kept up to date. Usually, complete revision is necessary every year or so, but procedures can be amended as necessary. Changes will occur frequently as we never find the best procedure, only a better one.

X. At one time or another we are all faced with the problem of a vacancy in the department. It is only natural for us to want the best possible person we can find for the job.

A. It is rare that prospective employee has had any experience working in a medical record department or any medical work experience whatsoever.

B. We do, however, want to select someone with good intelligence, at least a high school education, for most positions and with an incentive to learn new things and the ability to adapt to a different type of work than the person probably was accustomed to doing. Typing is usually a must except for a file clerk perhaps and a background in general office work would also be helpful.

XI. After selection and hiring of our new employee we must begin to train him.

A. It usually is well to start the employee on a simple job, as filing, or in another performance in which technical knowledge isn't necessary, but this depends on what this person was hired to do.

B. To help the employee adapt and become a useful employee as soon as possible, the following guide may be used in training the new employee or other employee in a new job:

1. Put the person at ease.
2. Determine present knowledge of job and interest him in learning remainder of job function.
3. Be careful to explain, show, and illustrate key points of the job.
4. Answer all questions as clearly and directly as possible.
5. Instruct slowly, taking up one point at a time.
6. Allow employee to perform operation.
7. Ask him to explain his procedure back to you.
8. Make necessary clarifications and corrections.
9. Continue instruction until employee knows the operation.
10. Allow him to continue on his own but do tell him to whom he should go for help if not to you.
11. Check work frequently and correct as necessary.
12. Put employee more and more on his own as his confidence increases.

XII. Location of the medical record department will vary according to size, structure, and type of hospital. We, some of us, know location will not always be as ideal in the small hospital as in the large hospital.

A. The ideal location for the department is in the administrative area or area which is most frequented by the physicians. There are other considerations to keep in mind, however. Whether or not the outpatient clinic is quite active or the filing system is centralized or decentralized will have a bearing on proper location. If the medical record librarian is also in charge of the medical library these two departments should be adjacent.

B. All functions of the medical record department should be centralized in one area. If research is conducted by the physician, sufficient space for this activity should be provided for in the department.

C. If older records must be filed in another file room because of lack of sufficient space, a room directly below the department with a stairway or lift mechanism would be ideal.

D. The department should be in an accessible area, then, in the hospital for convenience of physicians and other departments.

XIII. The physical layout of floor space and amount of equipment are of great importance in planning the department.

A. Adequate space is needed, but too much space often leads to inefficiency as does too little space.

1. Usually, we state that each worker needs 60 square feet of working space. This will include the desk and chair, file, or other equipment, and adequate aisle space.

2. No more than two desks should be together and each employee should have access to aisle space so as not to disturb other employees.

3. The employee or employees doing machine transcription should be placed in one end of the department away from traffic and noise. This will also minimize typewriter noise.

4. Space should also be allotted for the physicians coming in to complete their records or conduct research. A table should be provided for their use where lighting is adequate. It would be well to place this table in an area away from traffic, also.

B. Because employees of the department are involved in close work for long periods of time, adequate lighting becomes very important. Glare should be eliminated in desk areas as well as in filing areas. Poor and inadequate lighting will result in eye strain, headaches, and less efficiency of employees.

C. The use of color is stressed today probably more than at any other time in history. Patient and visitor areas of the hospital are attractively blended with various colors.

1. A good color scheme is also needed in hospital departments. From personnel studies that have been conducted it has been found that employees are happier and more efficient in pleasant surroundings. Many color schemes are available and, of course, personal preferences vary.

2. If there are no windows and the department is air conditioned, a cheerful yellow is good. This usually will blend with desks and files. If records are color coded, this will also add colorful touches. Too many colors or too many bright colors should be avoided, however.

3. Tricks with draperies can also be used on odd-sized windows as are sometimes found in old buildings.

D. A good tile floor isn't considered to be more economical in initial cost or upkeep than carpet. The use of carpet, too, may also absorb noise of office machines.

E. Decorating the department can be very enjoyable and, when all employees are involved, this creates a feeling of belonging and working together.

F. The equipment utilized in the department is governed by the number of employees in the department. Judging the number of employees in a 50- to 100-bed hospital as from two to four, we can come up with a list of necessary equipment.

1. We will need a desk and posture chair for each person, one to two tables, filing equipment for 27 to 54 feet of records, several other chairs, eight-drawer, triple-compartment 3 x 5 vertical card file for patient index, filing equipment for disease, operation and physicians' index, possible one to two four-drawer, letter-size file cabinets, recording and transcribing machines, and typewriters.

2. The filing equipment will vary depending on whether drawer files or open-shelf files are used for filing of medical records.

3. Equipment for indices will also vary according to use of vertical or visible type of filing.

4. If microfilming is done, drawer space will also be needed to house the rolls of film jackets and a viewbox or reader will be necessary.

5. Of course, other equipment is also necessary, as calendars, stamp pads, rubber stamps, clips, pens, rulers, etc.

6. Telephones should be strategically placed to provide good service and convenience for employees.

7. Equipment and uses of equipment change as better methods of contributing to efficiency of the medical record department are found. Greatest changes are in electric typewriters, dictating equipment, and electronic files for both index cards and medical records.

G. As length of stay decreases and turnover rate increases, more patients will be admitted and discharged from the hospital than ever before. To meet the workload and demands that result we must face the need for future expansion of the medical record department.

1. If your hospital is expanding its facilities this is a good opportunity to make your needs known. Architects and administrators are becoming more and more aware of the importance of the medical record department and that adequate space is needed for employees and for filing of records.

2. It is well to plan expansion very carefully and not the trial and error method. Expansion should be thought of in terms of needs for ten years.

XIV. As we want good organization of the hospital and the medical record department, we also want good organization of the medical record itself. Along with good organization, we would like conservation of forms.

A. In two recently conducted studies of medical records it was shown that there is a great waste of paper. Sometimes a whole sheet of paper is used, but only half of the sheet is written upon. It is also difficult to locate needed information in voluminous records. Think of the file room the excess paper will occupy and, if microfilming is used, the cost of maintenance and preserving will be more.

B. Doesn't the physician fuss if he is unable to find the particular portion of the record he is looking for? He likes to have the order sheet and progress notes form to be at his fingertips.

C. Neither the Joint Commission nor the American Hospital Association recommend any specific forms for medical records. This decision is to be made by the hospital, however, the format and design of the record should be developed so as to promote good records from the point of view of conforming to good standards plus the needs of the hospital.

D. In some communities all the hospitals work through a centralized committee designing record forms that will be acceptable to all the hospitals, thus economizing on printing costs. The physician, too, would rather have similar records in the hospitals that he visits. This will conserve his time and result in better conformance to good standards.

E. In some of the larger hospitals a record forms committee is established. This committee has the responsibility for studying proposed new forms. Necessity and correctness of the form can then be determined before the form is printed and put into use. This committee also discontinues all forms and makes necessary revisions on others. A sub-committee of the medical record committee could be used for this purpose or in the small hospital this may be a duty of the medical record committee.

F. A forms numbering system may be used for easy identification and for stock control. Samples of all editions of approved forms should be kept on file for reference. If a hospital-wide numbering system is used, the medical record forms should be coordinated with it.

G. Records should be kept simple and few in number to provide more flexibility and reduced bulk. In studying and reviewing forms, the following points should be considered:

1. Use paper of uniform size.
2. Keep the binding edge either top or side binding.
3. Keep the margin uniform. The forms should interchange with the metal chart holders on the wards.
4. If printing will be on both sides of the form, printing should be head to foot for easy reading of the chart; for side binding the printing will be head to head for book-type assembly of the chart.
5. Spacing of lines should be based on whether handwriting or typewriting or both will be used.

6. Select the weight and quality of the paper according to the life expectancy of the record and whether or not both sides of the paper will be used.

7. Avoid colored forms because it is sometimes difficult to photocopy color. A colored edge could instead be used.

8. Demonstrate a need and purpose for all items on the form.

9. List items in logical sequence, as age after date of birth, and phone number after address.

10. All forms should have the identification of the patient in a standard location.

11. Terminology in item headings should be consistent on all the hospital record forms.

12. Avoid forms that require recopying of information from other parts of the records.

13. Preprint the name of the hospital on all forms that may be later photocopied or for those used for carbon copies to be used outside of the hospital.

14. The use of multipart forms save time and avoid errors.

XV. There are several books that are recommended for use in the hospital. They may be in the library, administrator's office, medical record department, or where best centralized. These are:

American Medical Association, 1967 American Medical Directory, The Association, Chicago, 1967.

American Hospital Association, Hospitals 42, Aug. 1, 1968, (Guide Issue).

American Hospital Association, Hospital Accreditation References, The Association, Chicago, 1965.

Five Basic Publications of Joint Commission on Accreditation of Hospitals, JCAH, 645 N. Michigan Ave., Chicago.

Hayt, Emanuel and Hayt, Jonathan, Legal Aspects of Medical Records, Physician's Record Co., Berwyn, 1964.

Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Physician's Record Co., Chicago, 1963.

International Classification of Diseases Adapted, Vols. 1 and 2, United States Department of Health, Education and Welfare, Public Health Service, Washington, D.C., 1962.

MacEachern, Malcolm T., Hospital Organization and Management, Physician's Record Co., Berwyn, 1957.

Thompson, Edward T. and Hayden, Adaline C., Standard Nomenclature of Diseases and Operations, 3rd Ed., American Medical Association, Chicago, 1967.

In addition to these, there are other books that you should have in your department -- several medical dictionaries, a good English dictionary, a good medical terminology book, a textbook of anatomy and physiology, and a good reference book on secretarial practices.

XVI. Problems for students. We are faced with personnel problems every day. We will discuss the following problems after dividing into four groups.

A. I can not delegate some of my responsibilities to my subordinates as that will weaken my position and cause it to be reduced in importance. Discuss.

B. Susie is a good worker but argues each time she is asked to do something. Eventually she does a good job but wastes valuable time each time she starts a new procedure. How would you handle this employee?

C. Jane has been working in the medical record department for six months. She is doing medical transcription, mainly histories and physicals. As this is a small town, she knows many of the patients. She is doing well in her job but is very tempted to discuss the ills of the patients with others outside the hospital and indeed has done so. You, as the supervisor, become aware of this, hearing about it from someone outside the hospital. What would you do?

XVII. Re-cap of Session (2 hours).

A. The primary purpose of existence of the medical record department is for service to the patient.

B. The functions of the medical record department are characteristic of that department.

C. Effective organization and management of the medical record department must exist for proper performance of functions of the department.

D. The medical record librarian or supervisor must possess supervisory and technical skills.

E. There are methods such as good work flow, work simplification, job analysis, job description, and procedure manuals to aid the supervisor in organizing and controlling the department.

F. The supervisor should be able to plan the department in terms of physical layout and necessary equipment.

G. Good organization of the medical record itself is brought about by control of all forms comprising the medical record.

H. If personnel problems exist in the department, meet with them and try to solve these problems.

TOUR OF MEDICAL RECORD DEPARTMENT

I. Tour of Medical Record Department--Mercy Hospital and St. Joseph Hospital.

II. To give the students an opportunity to observe a highly organized medical record department, a tour of two such hospitals has been arranged. We will be visiting St. Joseph Hospital and Mercy Hospital, both in Denver. Because a smaller group is easier to conduct on a tour, half of the group will visit one hospital and the other group will visit the other hospital. These hospitals were chosen because the medical record departments are new, well spaced, staffed, and have new equipment. Even though the students are working in small hospitals and will be handling much of the work load by themselves, it will be beneficial for them to see a large operation and observe work flow in the department. It should also help the student to realize that many basic procedures must be carried out whether they are working in small or large hospitals.

III. Activities and Procedures--Outline for students to follow during tour.

- A. Name of hospital.
    - 1. Brief history of hospital.
    - 2. Present setup of hospital.
        - a. Number of beds.
        - b. Medical specialties.
        - c. Other.
- B. Brief tour of hospital.
- C. Tour of Medical Record Department.
    - 1. Patient index file.
    - 2. Work flow of records from discharge to permanent file.
        - a. Quantitative analysis.
        - b. Incomplete file (physician).
        - c. Transcription.
        - d. Signatures.

- e. Physician's index.
- f. Disease and operation indices.
- g. Insurance.
- h. Release of information.
- i. Medical record committee review.
- j. Permanent file.

3. Statistics.
   - a. Daily information gathered.
   - b. Monthly reports.
   - c. Annual reports.
   - d. Special reports.
4. Filing areas.
   - a. Recent.
   - b. Old.
   - c. Microfilm.
5. Room or area for physicians (dictation, review, etc.)
6. Research.
7. Other areas of interest.
   - a. Special indices or registries.
   - b. Other.

D. During the remaining hour for discussion the groups will exchange information concerning the hospital visited. The remainder of the time will be open for questions and general discussion. (This will be conducted back in the classroom at the hotel.)

SECRETARIAL SERVICES

In small hospitals the medical record clerk is sometimes required to serve as a secretary as a secondary duty and here secretarial training stands you in good stead and certainly increases your value as an employee. Such a position gives you a clear understanding of the over-all organizational structure and the very important part which you personally play in the proper care of the patient by providing complete, accurate, and adequate medical records and correspondence.

In writing letters the quality of your writing has a lot to do with how well you perform your duties. If you don't say what you mean the first time, the recipient of the letter has to ask for clarification. If you are wordy, he wastes valuable time getting your message. If your choice of language is unusual, too mechanical, or formal, he loses interest. If your thinking is illogical or bizarre he will not "buy" your solutions.

The basic purpose of all writing is to get a message across to the reader. You want your writing to convey exact meaning--good communications. If you have poor communications it will be as disastrous as the native Italian lady paying a visit to an American physician regarding her infertility. The physician stated to the lady that she had a deficiency in passion and if she ever had a baby it would be a miracle. The Italian lady hurried home to tell her husband the bad news, only she related her condition in this manner: "The doctor said I had de fish in de passage and if I ever had a baby it would be a mackerel." This is what I would call a complete breakdown in communication. The same applies in our own writing; it will be understandable only when you build in the reader's mind a pattern of thought closely akin to the one in your own mind.

Napoleon is said to have kept promoting one of his officers, much to everyone's surprise and chagrin. Finally, when a high-ranking officer asked Napoleon why he kept promoting this simple-minded fellow, he replied, "When I write an order, I give it to him to read. If he understands it, then anyone in the field can understand it. You see how valuable he is to me?" True or not, this incident dramatizes the importance of clear communication.

In its broadest sense, the term "Communication" includes all methods of conveying and receiving expressions of thought and feeling. We may define it more precisely as the process of transmitting thought from one mind to another. Any act of communication involves three necessary components: a communicator who has meaning to transmit; a symbol or system of symbols that carries the meaning; and a receptor who receives the symbol and translates it into meaning in his own mind. In writing, no communication occurs unless your reader is able to understand your thought--get your message. Any word in the English language usually has several meanings.

Organization to write is the most important phase in the writing process. You can use your high school or college teacher's best English grammar; you can punctuate precisely according to the rules; you can construct smooth-flowing sentences; but, if you don't organize your writing logically and in a sequence that will lead your reader from one point to the next, you may as well not write at all.

A letter's appearance, how it first strikes a reader's eye, can influence his state of mind when he absorbs its contents.

A letter under 50 words looks better if the body is double spaced with triple spacing between paragraphs. A full-page letter with minimum margins is preferable to a two-page letter. If you do use a second page, make the left and right margins the same as on the first page.

Every office has a preferred style for the letters it sends out; very often the person who has determined that style is you. If the choice is up to you, select a style that you consider to be appropriate, neat, efficient, and dignified.

Misspelled words and strike overs should never be found on any correspondence or medical records and reports. It is not a cardinal sin to keep good old Webster and Dorland at your elbow nor is it believed you would get "fired" for doing so. This would probably come nearer to happening if you typed a lot of misspelled words or had strike overs.

Sometimes it is felt that typing and shorthand are unnecessary, but these skills are needed in the medical record departments of hospitals. However, with increasing use of dictating equipment, the requirement for shorthand decreases. Nonetheless, a knowledge of the fundamentals is required to run your department effectively.

To fill a stenographic capacity, the worker must have an expert knowledge of medical and surgical terminology. A basic knowledge of anatomy and physiology is also of very great assistance. Adaptability to a high degree is essential because the stenographer, too, works with many types of people, most of whom are under tension.

The value of medical records is in direct proportion to the thoroughness and accuracy with which they are compiled. In the past, vast files of medical records lacking in scientific essentials have accumulated in our hospitals. This came to pass not because physicians have underestimated the value of accurate and adequate data, but because the immediate welfare of the patient was their prime concern at the time of the patient's hospitalization. Completion of the records was put off for a more opportune moment. When that time arrived, details of the cases had been crowded out of their minds by more recent cases. This situation led hospital governing boards and administrators to provide physicians with the services of medical record librarians, medical record clerks, and medical and surgical stenographers trained in taking shorthand dictation or in transcribing dictation recorded mechanically. In addition, medical record clerks and medical and surgical transcriptionists must have adequate knowledge of medical terminology to efficiently assist the member of the medical staff. Medical terminology and anatomy and physiology enable medical record personnel to understand the subject matter that you encounter in your daily work.

Medical record personnel must know the essentials required to prepare an adequate report of a personal history and physical examination so that all information pertinent to the case may be obtained at the time dictation is received. You must know that the terms "negative" and "normal" are not to be accepted and recorded, because these terms are not facts but opinions. You must know that if an inquiry has not been made into a specific condition, a statement should be made to that effect. Knowledge of medical terminology qualifies the transcriptionist especially well for medical and surgical dictation, but you also perform a valuable service in the transcription of discharge summaries, abstracts, and insurance reports. The terms used by the physicians and surgeons differ markedly and it is you that can translate them into the terminology of the nomenclature used. You should know that eponyms (operations and diseases named after surgeons and physicians) are to be avoided; if the surgeon's dictation states that he has performed a "Potts" or a "Potts-Smith-Gibson" operation you know that according to the terminology of operation nomenclature the title of the operation should be "Pulmonary aortic anastomosis."

You must also be acquainted with the names of reparative materials used in surgery. Material used in surgery are of two kinds: organic--such as catgut, kangaroo tendon, etc., and inorganic--such as metal plates, pegs, and clips. You must be acquainted with the terminology of incisions and the types that are used most frequently. The individual surgeon, of course, makes the choice of the types of incision to be used. The differences in choice are many.

In addition to acquiring a general knowledge of surgical terminology, the materials used, the methods of suturing, and the types of incisions, the medical record clerk must also acquaint himself with the essentials of a complete surgical report. While different hospitals use different forms for reporting operations, the information contained on the forms must be a complete record of the work done. The full names of the surgeons and assistants must be recorded when dictation is taken. Some member of the operating room staff assumes responsibility for the sponge count.

The value of the surgical report is in direct proportion to the detail obtained. The report of any operation should give the date of the operation and also the date of the dictation, the preoperative diagnosis, the type of incision used, the operative findings (including a description of the normal as well as the pathological findings), the technique used in surgery, the type and number of drains used and the manner of their insertion, the method used in closure of the operative wound, and the postoperative diagnosis upon completion of surgery.

The surgeon should read the completed reports, make any corrections or additions necessary, and sign them before discharge of the patient. If this has not been done, it must be completed before final filing of the medical record in the medical record department.

Sometimes the surgeon may omit pertinent information when dictating a report; therefore, the transcriber should be familiar with the data which should be contained in reports of various types of operations. Thus, if you find when typing a report that necessary information has been omitted, you may contact the surgeon and request additional details.

Extreme care must be exercised by the medical record clerk when analyzing the medical records to determine if accurate data have been recorded as to whether an operation has been performed bilaterally, or on the right or left side. Such information is extremely important in subsequent illness of the patient and valuable for purposes of research.

In your secretarial dictation system you should insure that there will be adequate control. Physicians do not procrastinate as frequently about dictation as they do about writing. In addition, reports are more legible, accurate, and complete since they are dictated before the physician has had time to forget important essentials.

Summary

It is the responsibility of the hospital not only to provide facilities to expedite the work of the physician in caring for the patient, but also to facilitate his record-keeping responsibilities by providing well-qualified medical record clerks and some form of dictation equipment. Medical record personnel are of special value in assisting the busy physician. You should be trained in the rudiments of medical terminology and be familiar with the overall content of medical records. Even though you may not hear a certain word or phrase distinctly, you should be familiar enough with the subject matter to make out what has been dictated and to spell medical terms correctly.

BASIC FILING SYSTEMS

BASIC FILING SYSTEMS

I. Topic: Basic Filing Systems and Arrangements Used in Medical Record Departments.

II. Objectives: The objectives of this lesson are to acquaint the student with filing systems used in medical record departments, why such systems are used, and to afford opportunity for practice in filing arrangements, both alphabetical and numerical. At the end of this two-hour session the student should be acquainted with these various filing systems and begin to understand which system would best fit his respective hospital. (The student will have an opportunity to further discuss individual needs in after-class hours and/or with the consultant.)

III. Activities and Procedures: Lesson Presentation.

- A. Filing arrangements.
    - 1. Alphabetical.
    - 2. Numerical.
- B. Four required indices maintained in medical record department.
    - 1. Patient index.
    - 2. Physicians' index.
    - 3. Disease index.
    - 4. Operation index.

      (We will not be concerned in this lesson with physicians' index, disease index, or operation index. They are merely mentioned here because they are included with the patient index as required indices.)
- C. Patient index.
    - 1. Most important index in medical record department.
    - 2. Cards are initiated in either admission department or medical record department.
    - 3. Cards can be filed either alphabetically or phonetically.

4. Number index.
5. Permanency of file.
6. Personnel--orientation.
7. Content and size of card.
   a. 3 x 5 card.
   b. Information contained on card.
8. Steps for filing (alphabetical) according to letters of alphabet.
   a. Strict alphabetical sequence.
   b. Special problems encountered with various names.
   c. Number of cards behind each guide.
   d. Advantages of system.
   e. Searching for misfiles.
   f. Practice sessions.
9. Steps for filing (phonetic or Soundex) a system in which words or names filed according to sound in pronunciation.
   a. Surnames are coded to Soundex Code.
   b. Method of coding.
   c. Method of filing.
   d. Advantages of system.
   e. Practice session.
10. Questions from students on patient index.

D. Method of filing of medical record folder.
   1. Numbering systems.
      a. Unit.
      b. Serial.
      c. Modified system of serial unit.

2. Filing systems.
    a. Centralized.
    b. Decentralized.
3. Filing of medical records.
    a. Strict numerical.
        (1). Procedure of filing.
        (2). Personnel.
        (3). Filing equipment.
        (4). Practice session.
    b. Terminal digit.
        (1). Procedure of filing.
        (2). Personnel.
        (3). Filing equipment.
        (4). Practice session.
    c. Charge out systems.

E. Short recap of two-hour session.
    1. Questions from students.
    2. Discussion.

IV. Assignment: Guide to Organization of a Hospital Medical Record Department, American Hospital Association, Chicago, 1962, Ch. 3, "Record Filing System."

Questions will be posed to the students during the lecture portions. Audio-visual aids will be used in giving filing instructions for patient index, both alphabetical and phonetic, and for filing medical records, both strict numerical and terminal digit.

V. Bibliography:

American Hospital Association, Guide to the Organization of a Hospital Medical Record Department, American Hospital Association, Chicago, 1962.

Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Physicians' Record Co., Berwyn, 1963.

Remington Rand, Brochures on Soundex Filing System.

BASIC FILING SYSTEMS

I. Filing arrangements: Generally medical record departments use two filing arrangements, alphabetical and numerical.

A. When we use the alphabetical arrangements we are mainly concerned with a name card file or any other file we would like to have arranged by alphabetical order.

B. When we use the numerical arrangement we are concerned with filing of the medical record folder.

C. During our first hour we will discuss the alphabetical arrangement and the numerical arrangement will be discussed during our second hour.

II. The four required indices maintained in the medical record department are:

A. Patient index.

B. Physicians' index.

C. Disease index.

D. Operation index.

(We will not be concerned in this lesson with physicians' index, disease index, or operation index. They are merely mentioned here because they are included with the patient index as required indices.)

III. Patient index.

A. This is the most important index in the medical record department because it holds the key in locating medical records of all patients.

B. These cards may be originated in the admitting office or in the medical record department depending on size and needs of the hospital.

C. Cards may be filed either alphabetically or phonetically.

D. The hospital number under which we file the medical record will either be issued by the admitting office or the medical record department. It is most important that a good control be maintained over issuance of these numbers. Consecutive numbers may be listed in a register book or other such book. When the patient is admitted the next unused number is given to him.

Usually, name, address, and admission date are sufficient information in this register. This may be called the number index or patients' register, or a combination of the two. The index can be an invaluable tool in locating a record if the index card has been lost or hopelessly misfiled.

E. The patient index is a permanent file; however, cards may be removed and stored elsewhere at certain intervals. For example, if the patient has received no treatment for 25 years or patients over 65 haven't been in the hospital for 10 years, these cards could be removed and placed in a storage area; however, they shouldn't be destroyed. One master file is better than a year-by-year file.

F. The patient index should be audited periodically for misfiles and, if possible, one person should be made responsible for filing these cards. New employees should receive thorough orientation before filing. A small colored strip cut from cards could be placed behind the new card filed and another employee could check accuracy of filing on the following day.

G. In most medical record departments today, the 3 x 5 index card is used; however, some 5 x 8 cards are still in use. It has been found that the 3 x 5 card is the most convenient for handling and filing. These cards should be filed in vertical file drawers. Filing equipment will vary according to size of department and hospital. Information contained on the card should at least include full name, surname followed by given name and middle name or initial, address, date of birth, and hospital number. It is suggested that a minimum of information be listed if this file is open to others.

H. Steps for filing are as follows:

1. Arrange cards in strict alphabetical sequence placing surname first, then given name and middle name or initial. If surname and given name are the same, arrange cards according to initial. If there is no initial, place earliest birth date on top.

2. Names beginning with prefixes or hyphenated names are filed in strict alphabetical sequence. Names beginning with Mc or Mac are filed in strict sequence unless you are using commercial guides separating Mc and Mac. This is acceptable, but be consistent. File any religious names as brothers and sisters under religious name commonly used; however, it is well to place the family surname in parenthesis. Legal name of a

married woman along with her given name should be used, as Thomas, Mrs. Eileen (John). If a female patient has married since her last period of hospitalization, a cross reference should be made. One card is left filed under her maiden name indicating a reference to the card filed under the married name. This can also be done when a patient is admitted with an alias.

3. No more than 20 cards should be filed behind a guide; therefore, a file with 4,000 cards would require a 200-division index. Generally, there are twice as many W's as A's, B's as G's, and one name in every 5 begins with either M or S; Q, X, and I are few.

4. The main advantages of this type of filing of the patient index cards are easy maintenance and clerks can be oriented to filing with minimal instruction.

5. If a card appears to be misfiled, look for various ways the name might have been spelled.

6. Practice session: Place names in order for alphabetical filing in patient index.

I. The phonetic system or Soundex is a system in which words or names are filed according to sound in pronunciation.

1. When cards are filed according to this system, the surname is coded to one alphabetic letter, the beginning letter, and a 3 digit code number. The first letter of the surname is not coded. Then cards are arranged in alphabetical order with 26 sections. Within each section 6 groups are used. Each group has a code number as follows:

Letters	Number equivalents
b, f, p, v	1
c, g, j, k, q, s, x, z	2
d, t	3
l	4
m, n	5
r	6
no consonants, or not enough consonants	0

a, e, i, o, u, y, w, and h are not coded--no number equivalents.

2. Five rules for coding.

   a. Each name is coded to 3 digits.

   b. Two letters together or double letters are coded as one letter.

   c. If a letter and its equivalent appear together, they are coded as one letter.

   d. The first letter in the surname is not coded but appears with the 3 digits.

   e. Vowels and y are separators. H and w are not coded either.

3. In filing according to this system, alphabetic guides are used which designate first letter of surname. There will be 26 main divisions. Sub-guides include soundex code numbers. Sub-guides with first names and initials may be used in large systems.

4. Soundex may be used in vertical or visible files. The system also has a great advantage in communities where there are many foreign names. One disadvantage is that with the system one file clerk, who is able to code with extreme accuracy, is needed.

5. Practice session: Place code numbers according to Soundex on sheet next to name.

J. Questions of students.

End of first hour.

IV. Methods of filing of medical record folders. There are several numbering and filing systems that are used today in medical record departments.

A. These numbering systems are: unit, serial, and a modification of the two known as serial-unit.

1. When using the unit numbering method, the patient is given one number on his first admission and retains this same number on all subsequent admissions. All records are filed together in one folder and the physician has all past records available when the patient is readmitted.

2. When using the serial numbering method, the patient is given a new number each time he comes in for admission. Each record of treatment is

then filed in a separate place according to the number issued. If the physician would like to see all past records, it would take some time to gather all records depending on number of admission that the patient had in the past.

3. When using the serial-unit numbering method, the patient is given a new number, but his old records are brought up and filed with the new record. An outguide is left in the place where the old record was filed. The new number will be placed on this card so anyone looking for the old record would be able to find it filed under the new number. This system gives us a unit record even though we are using unit numbers.

   Regardless of numbering method used, medical records can be numbered to 999,999. Another method is beginning at the first of the year with number 1 and adding a letter, as A, B, etc. This, however, isn't recommended as an error in the letter could easily result.

B. There are two types of filing systems, centralized and decentralized.

   1. In a centralized filing system, all medical records, both inpatient and outpatient, are filed together within a central place. In using this system the unit numbering method is used. All admissions and outpatient visits are then filed together. The record is continuous and repetition of all information is avoided. When using this system, one person should have control of the number index, and, if necessary, blocks of numbers are issued to various departments, as numbers 100 to 150 to X-ray and 151 to 200 to the laboratory. This is considered an ideal system by many, particularly if there are many readmissions and visits to the outpatient departments.

   2. In a decentralized filing system, inpatient and outpatient records are filed independently of each other. The inpatient record is generally filed in the medical record department and the outpatient record or records are filed within each individual department. All numbering methods could be used with the decentralized system. This system, however, results in much duplication and needed information is not always available. For this reason the centralized system is the most advantageous.

C. After choosing our numbering method and our filing system, we must decide how we are to file the records, either in a straight numerical file or terminal digit file.

1. By straight numerical we mean filing according to number sequence.

    a. When preparing a stack of charts to be filed, the first step is to arrange these charts in numerical order.

    b. Personnel who will be filing should be oriented to proper methods of filing, as checking preceding number and following number of the record being filed.

    c. Filing equipment is very important according to size of department and hospital. The trend today is to open shelving rather than file-drawer cabinets. It is claimed that open shelving affords 50 to 75% more space for filing than drawer files. The open shelf method also saves time and effort of personnel. Cost of equipment is generally less with open shelving and less floor space is required.

    d. Practice session: Each student is given 15 cards to file numerically. (Might have them check each other.)

2. Terminal digit filing is a fast and accurate method of filing medical records. This system is particularly useful in hospitals where many records are pulled in a day or where readmissions and outpatient visits are many. When this method is used, the unit numbering or serial-unit numbering method in a centralized system is most advantageous. Guides in shelving are prepared from 00 to 99.

    a. When filing by this method, separate the number on the chart folder in pairs, as 00-41-02. 02 becomes the primary number. If we were to file this chart we would go to the guide marked 02. 41 is the secondary number. All records filed behind the 02 guide are in numerical order. 41 would be filed behind 40.

    b. Personnel can file by this method with minimal instruction. Generally, filing errors are reduced as most of these folders are color coded and the file clerk must remember only two numbers at a time.

c. Open shelving is used with this method of filing. Because the records are color coded, misfiles can be easily spotted.

d. Practice session: Each student is given 15 cards to file by terminal digit.

3. Because it is essential that medical records be kept ready and available at all times for the card of the patient, we must be able to produce these records when needed. To do this, some sort of charge-out system must be used when a chart is taken from the file. Various types of cards or out-guides are available from commercial companies. The important thing is that the whereabouts of the record should be known at all times. It is well to check these out-guides periodically to insure prompt return of records to the file.

V. Recap of session.

A. There are alphabetical and numerical arrangements in the medical record department.

B. The patient index file is the most important file in the medical record department.

C. Numbering methods of records are: unit, serial, and serial-unit.

D. Records may be filed in straight numerical sequence or by terminal digit.

E. A good charge-out system is invaluable in prompt location of all medical records.

VI. Assignment: Guide to Organization of a Hospital Medical Record Department, American Hospital Association, Ch. 3, "Record Filing System."

INTERNATIONAL CLASSIFICATION OF DISEASES AND OPERATIONS

INTERNATIONAL CLASSIFICATION OF DISEASES

I. Topic: Basic Principles of ICDA.

II. Objective: To familiarize the student with the ICDA coding system.

III. Activities and Procedures:

A. Explanation of the ICDA code.

B. Discussion of the uses of the ICDA.

C. Presentation of examples and coding problems using the ICDA with operations.

IV. Materials: Examples, coding problems, 5 x 8 steel file containing indices for Diseases and Operations.

V. Assignment: Coding problems will be given the students as homework. These will be checked in class the following session.

VI. Reference: International Classification of Diseases Adapted, Vol. 1, U. S. Department of Health, Education, and Welfare, Public Health Service, Washington, D.C., 1962.

ICDA CODING SYSTEM

I. What is ICDA?

A. Background.

1. International Classification of Diseases, adapted for indexing hospital records by diseases and operations. (U. S. Public Health Service Publication 719, Revised Edition, 2 Vols., December, 1962).

2. Method of classifying diseases and operations for:

a. Research purposes.

b. Joint Commission requirement.

B. Explanation of ICDA Code Books.

1. Vol. II. Alphabetical Index.

a. Arranged by condition, not anatomical site, i.e., "hemorrhage of mouth," look under "hemorrhage" not "mouth."

b. Arranged by noun rather than adjective, i.e., "acute appendicitis" is listed under "appendicitis, acute," rather than "acute."

2. Vol. I Tabular List.

a. Section I--Diseases and Injuries.

b. Section II--Operations and Treatments.

c. Arranged in numerical order by code number.

II. Explanation of Contents of Vol. I.

A. Read through major diagnostic groups with brief explanation of each.

1.	Infective and Parasitic Diseases	Page 1
2.	Neoplasms	" 23
3.	Allergic, Endocrine System, Metabolic and Nutritional Diseases	" 51
4.	Diseases of Blood and Blood-forming Organs	" 61
5.	Mental, Psychoneurotic and Personality Disorders	" 65
6.	Diseases of the Nervous System and Sense Organs	" 73

7. Diseases of the Circulatory System Page 91
8. Diseases of the Respiratory System " 103
9. Diseases of the Digestive System " 111
10. Diseases of the Genitourinary System " 129
11. Deliveries and Complications of Pregnancy, Childbirth, and Puerperium " 146
12. Diseases of the Skin and Cellular Tissue " 159

13. Diseases of the Bones and Organs of Movement " 173
14. Congenital Malformations " 186
15. Certain Diseases of Early Infancy " 194
16. Symptoms, Senility, and Ill-defined Conditions " 198
17. Injuries and Adverse Effects of Chemical and Other External Causes " 207

III. Coding Problems.

A. Infective and Parasitic Diseases. (Use Vol. II--look up underlined word.)

		Answer
1.	Pulmonary tuberculosis, active, minimal	002.0
2.	Pleurisy with effusion due to tuberculosis	003.1
3.	Pulmonary tuberculosis, active	002.3
4.	Primary tuberculosis of skin	014.0

B. Neoplasms, Malignant (140-239)

1.	Carcinoma of the ovary	175.0
2.	Adenocarcinoma of the prostate	177.
3.	Carcinoma of the cervix	171.
4.	Carcinomatosis	199.9

C. Allergic, Endocrine System, Metabolic and Nutritional Diseases (240-245), page 51. Subgroupings should always be used with codes 240 to 245.

1.	Allergic bronchitis due to feathers	241.2
2.	Urticaria, due to undetermined etiology	243.9
3.	Diabetes Mellitus	260.

D. Diseases of Blood and Blood-forming Organs

1.	Iron deficiency anemia secondary to blood loss	291.0
2.	Anemia	293.
3.	Polycythemia	294.

E. Mental, Psychoneurotic, and Personality Disorders (300-329).

1.	Delirium tremens (alcoholic)	301.1
2.	Manic Depressive Reaction	319.2

		Answer
F.	Diseases of the Nervous System and Sense Organs (330-398)	
	1. Cerebral thrombosis	332.1
	2. Cerebral encephalopathy due to arteriosclerosis or hypertension	334.1
	3. Paralysis agitans	350.
G.	Diseases of the Circulatory System (400-468)	
	1. Rheumatic fever without mention of heart involvement	400.
	2. Active rheumatic myocarditis	401.2
	3. Acute coronary occlusion	420.1
H.	Diseases of the Respiratory System (470-527)	
	1. Acute nasopharyngitis (common cold)	470.
	2. Bronchopneumonia due to staphylococcus	491.2
	3. Spontaneous pneumothorax	520.
I.	Diseases of the Digestive System (530-587)	
	1. Ulcer of stomach without perforation, with hemorrhage	540.1
	2. Gastroduodenitis	543.
	3. Acute appendicitis, gangrenous	550.
J.	Diseases of the Genitourinary System (590-637)	
	1. Acute nephritis	590.
	2. Pyelitis, pyelonephritis	600.0
K.	Deliveries and Complications of Pregnancy, Childbirth, and Puerperium (640-689)	
	1. Pyelitis of pregnancy	640.0
	2. Preeclampsia of pregnancy	642.2
	3. Threatened abortion	648.0
	4. Abortion, incomplete	650.0
	5. Delivery without mention of complication	660.
	6. Delivery complicated by cephalopelvic disproportion	674.0
L.	Diseases of the Skin and Cellular Tissue (690-716)	
	1. Furunculosis of face	690.0
	2. Cellulitis of right upper arm with lymphangitis	693.2
	3. Eczema	701.
	4. Eczema, atopic	708.3

			Answer
	M.	Diseases of the Bones and Organs of Movement (720-749)	
	1.	Acute arthritis, nonpyogenic	721.
	2.	Rheumatoid arthritis	722.0
	3.	Osteoarthritis	723.0
	4.	Acute osteomyelitis	730.0
	5.	Herniation of nucleus Pulposus	735.
	6.	Synovitis of shoulder	741.1
	N.	Congenital Malformations (750-759)	
	1.	Congenital hydrocephalus	752.
	2.	Congenital hypertrophic pyloric stenosis	756.2
	3.	Congenital megacolon	756.5
	4.	Imperforate anus	756.6
	O.	Certain Diseases of Early Infancy (760-776)	
	1.	Ophthalmia Neonatorum	765.
	2.	Erythroblastosis without mention of nervous affection	770.0
	3.	Hemorrhagic disease of the newborn	771.
	P.	Symptoms, Senility, and Ill-defined Conditions (780-795)	
	1.	Convulsions	780.2
	2.	Epistaxis	783.0
	3.	Pylorospasm	784.2
	Q.	Injuries and Adverse Effects of Chemical and Other External Causes (800-999)	
	1.	Fracture, closed, of cervical spine	805.0
	2.	Fracture, open, of pelvis	808.1
	3.	Fracture, open, intertrochanteric section of femur	820.1
	4.	Dislocation of acromioclavicular joint	831.
	5.	Concussion of brain	852.0
	6.	Traumatic hemothorax with open wound into thorax	860.1
	7.	Traumatic amputation of thumb without complication	886.0
	8.	Contusion of abdominal wall	922.
	9.	Anaphylactic shock	999.0
	10.	Hospital contracted infection due to transfusion	999.5
IV.		Coding Problem on Operations.	
	A.	Operations on Nervous System (01-06)	
	1.	Craniotomy	01.0
	2.	Lobotomy	01.1
	3.	Spinal puncture	03.3

B.	Operations on Endocrine System (08-09)	Answer
	1. Thyroidectomy, subtotal	08.1
	2. Ligation of thyroid arteries	08.6
C.	Operations on Eye (10-18)	
	1. Enucleation of eyeball	10.4
	2. Extraction of lens, intracapsular	17.4
D.	Operations on Ear, Nose, and Throat (20-22)	
	1. Tympanotomy	20.4
	2. Mastoidectomy, simple	20.7
	3. Submucous resection of nasal septum	21.1
E.	Operations on Buccal Cavity and Esophagus (24-28)	
	1. Extraction of tooth, simple	24.1
	2. Removal of salivary calculus	25.1
	3. Tonsillectomy without adenoidectomy	27.1
	4. Dilation of esophagus	28.6
F.	Operations on Heart and Intrathoracic Vessels (30-32)	
	1. Commissurotomy	30.3
	2. Catheterization of right heart	30.4
	3. Removal of embolus of great vessel, intrathoracic	31.1
G.	Operations on Bronchi, Lung, Pleura, Chest Wall, and Mediastinum (33-35)	
	1. Thoracentesis	34.1
	2. Complete lobectomy	35.3
H.	Operations on Gastrointestinal Tract and Related Organs and Tissues (40-57)	
	1. Repair of inguinal hernia, recurrent	40.1
	2. Exploratory laparotomy or celiotomy	41.1
	3. Pyloromyomoty	44.1
	4. Total Gastrectomy	44.3
	5. Appendectomy	45.1
	6. Colostomy	47.1
	7. Choledochotomy	53.0
	8. Splenectomy	56.1
	9. Removal of embolus of abdominal aorta	57.1
I.	Operations on Urinary and Male Genital Systems (60-69)	
	1. Nephrectomy, complete	60.4
	2. Nephropexy	60.6

		Answer
3.	Ureterectomy	62.1
4.	Cystectomy, complete	63.2
5.	Urethroplasty	64.4
6.	Prostatectomy, transurethral	66.2
7.	Incision and drainage of cyst of tunica vaginalis	67.0
8.	Orchiectomy, bilateral, complete	67.5
9.	Epididymectomy	68.5
10.	Vasectomy, complete	68.1

J. Operations on Female Genital Organs, Excluding Obstetrical (70-75)

1.	Salpingo-oophorectomy, unilateral	70.3
2.	Biopsy of ovary	70.8
3.	Salpingectomy, bilateral	71.2
4.	Hysterectomy, total, vaginal approach	72.6
5.	Dilatation and curettage of uterus	72.8
6.	Hysteropexy	73.4
7.	Repair of cystocele and/or rectocele	74.4
8.	Excision of Bartholin's gland	75.3

K. Obstetrical Procedures (76-78)

1.	Artificial rupture of membranes	76.0
2.	Delivery by low forceps with episiotomy	76.4
3.	Dilation and curettage following abortion	77.1
4.	Repair of laceration of cervix, postpartum	77.2

L. Operations on Musculoskeletal System (80-87)

1.	Excision of bone for graft (donor site)	80.3
2.	Complete ostectomy	80.4
3.	Sternal puncture	80.6
4.	Refracture of bone for faulty union	81.2
5.	Closed reduction of femur	82.0
6.	Open reduction of fibula with internal fixation	82.2
7.	Arthrotomy of knee	83.0
8.	Excision of semilunar cartilage of knee joint	83.5
9.	Spinal fusion, lumbosacral	84.4
10.	Excision of bursa of great toe	85.3

M. Operations on Peripheral Blood Vessels and Lymphatic System (88)

1.	Ligation and stripping of varicose vein of leg	88.4
2.	Radical neck dissection	88.7
3.	Biopsy of lymph nodes	88.8

		Answer
N.	Operations on Skin and Subcutaneous Tissue (90)	
	1. Onychectomy	89.2
	2. Biopsy of skin and subcutaneous tissue	89.8
O.	Non-Surgical Procedures (90-99)	
	1. Otoscopy for removal of foreign body	90.0
	2. Laryngoscopy	90.2
	3. Cystoscopy	90.6
	4. Proctoscopy	90.5
	5. Myelography	92.1
	6. Retrograde Pyelography	93.2
	7. Deep radiation therapy	95.2
	8. Gynecological implants of radioactive substance	95.5
	9. Shock therapy	99.0
	10. Use of artificial kidney	99.5

INTRODUCTION TO CODING

General Principles:

Classification is fundamental to the quantitative study of any phenomenon. It is recognized as the basis of all scientific generalization and is therefore an essential element in statistical methodology. Uniform definitions and uniform systems of classification are prerequisites in the advancement of scientific knowledge. In the study of illness and death, therefore, a standard classification of disease and injury for statistical purposes is essential.

There are many approaches to the classification of disease. The anatomist, for example, may desire a classification based on the part of the body affected. The pathologist, on the other hand, is primarily interested in the nature of the disease process. The clinician must consider disease from these two angles, but needs further knowledge of etiology. In other words, there are many axes of classification and the particular axis selected will be determined by the interests of the investigator. A statistical classification of disease and injury will depend, therefore, upon the use to be made of the statistics to be compiled.

Diseases and operations may be classified in many ways. For hospital indexing purposes, the most efficient classification system is one which permits the location of a maximum number of pertinent records with the review of the least number of records. A perfect system of disease classification for diagnostic indexing purposes must anticipate every request for patient records in all hospitals which will use the classification and make specific provisions for every diagnostic category in which requests for patient records will be made. Such a system is impossible of attainment. On the other hand, it is possible to devise a system based upon experience in the various hospitals which will yield the needed records with reasonable efficiency.

The present adaptation of the International Classification of Diseases provides a means of classifying diseases and operations for indexing hospital records. The International Classification of Diseases was developed for the statistical compilation of diseases and causes of death primarily for the use of public health agencies. The purpose of such statistical studies is to answer questions about groups of related cases of significance to the health of the population. Therefore, in the International Classification of Diseases, diseases are grouped according to the problems they present. For example, the major infective and parasitic diseases are listed in one section and ALL malignant neoplasms are brought together in another section. A specific disease entity is given a separate title or code number in the classification only when its separation is warranted because of the frequency of its occurrence, or its importance as a morbid condition justifies a separate category. Conditions of less importance from this point of view are grouped together, frequently as residual groups of a particular anatomical site or physiological system. This arrangement results in a relatively simple numerical code. Three digits cover the major categories or titles with fourth-digit subdivisions in many instances to permit classification of greater detail, if desired.

The grouping of related conditions in the International Statistical Classification of Diseases recommends it for indexing diagnoses in hospitals because requests for study material in hospitals so often follow the same pattern. Also, the simplicity of the code scheme presents fewer coding difficulties and is well suited to mechanical tabulation. The problems and points of view of a hospital and a health agency using the International Classification of Diseases do, nevertheless, differ in certain respects. It was therefore found necessary to modify details of the International Classification to adapt it to hospital use.

Coding:

Until certain where a given disease is coded in the ICDA, one should refer first to the Alphabetical Index, Vol. II. As one becomes familiar with the classification, the Alphabetical Index will be needed less frequently, but it is not advisable to guess where a specified condition will be classified. Failure to consult the Alphabetical Index might lead one to code, for example, congenital thoracic deformity of spine under 758.6, "Other congenital malformations of spine or vertebrae," instead of under 745, "Curvature of spine." Careful use of the Alphabetical Index and, most of all, careful attention to the inclusion and exclusion notes in Vol. I will help the user avoid such pitfalls. Certain abbreviations are used in both volumes. NOS means "not otherwise specified" or unqualified; NEC means "not elsewhere classifiable."

Every effort should be made to avoid the use of vague titles such as "unspecified" or "other."

Because this is a classification of diseases and in no sense a nomenclature of correct terms, the International Classification of Diseases should not be given to doctors as a guide in expressing their diagnoses. There is still need for doctors to phrase diagnoses correctly and in a uniform manner according to the Standard Nomenclature to ensure accurate coding by this International Classification.

INDEXING

	Headings for Cards for Disease Indices	Codes
I.	Infective and Parasitic Diseases.	002-138
II.	Neoplasms	140-239
	Malignant (140-199.9)	
	Benign (210-229)	
	Unspecified (230-239)	
III.	Allergic Endocrine System, Metabolic and Nutritional Diseases	240-289
IV.	Diseases of Blood and Blood-forming Organs. . .	290-299
V.	Mental, Psychoneurotic and Personality Disorders	300-329
VI.	Diseases of the Nervous System and Sense Organs	330-398
VII.	Diseases of the Circulatory System.	400-468
VIII.	Diseases of the Respiratory System.	470-527
IX.	Diseases of the Digestive System.	530-587
X.	Diseases of the Genitourinary System.	590-637
XI.	Deliveries and Complications of Pregnancy, Childbirth and Puerperium	640-689
XII.	Diseases of Skin and Cellular Tissue.	690-716
XIII.	Diseases of Bones and Organs of Movement. . . .	720-749
XIV.	Congenital Malformations.	750-759
XV.	Certain Diseases of Early Infancy	760-776
XVI.	Symptoms, Senility and Ill-defined Conditions .	780-795
XVII.	Injuries and Adverse Effects of Chemical and Other External Causes	800-999
Supplementary Classifications		
	Special Conditions and Examinations without Sickness.	Y00-Y18

	Codes
Classification of Liveborn Infants According to Type of Birth	Y20-Y29
Classification of Causes of Stillbirth	Y30-Y39
Supplementary Classification of External Cause of Injury	E802-E998

Headings for Cards for Operation Indices

Classification of Operations and Treatments

1.	Operations on Nervous System	01-06
2.	Operations on Endocrine System	08-09
3.	Operations on Eye	10-18
4.	Operations on Ear, Nose, and Throat	20-22
5.	Operations on Buccal Cavity and Esophagus	24-28
6.	Operations on Heart and Intrathoracic Vessels	30-32
7.	Operations on Bronchi, Lung, Pleura, Chest Wall, and Mediastinum	33-35
8.	Operations on Breast	38
9.	Operations on Gastrointestinal Tract and Related Organs and Tissues	40-57
10.	Operations on Urinary and Male Genital Systems	60-69
11.	Operations on Female Genital Organs, Excluding Obstetrical	70-75
12.	Obstetrical Procedures	76-78
13.	Operations on Musculoskeletal System	80-87
14.	Operations on Peripheral Blood Vessels and Lymphatic System	88
15.	Operations on Skin and Subcutaneous Tissue	89
16.	Certain Non-surgical Procedures	90-99

CODING AND INDEXING (ICDA)

I. Topic: Brief Review of ICDA and Explanation of the Use of Volumes I and II.

II. Objective: The students are to learn how to locate the various diseases and operative procedures.

III. Activities and Procedures:

Hospitals are required to maintain a minimum of four indices--the patients' index, physicians' index, disease and operation indices. Cards will be distributed to the students and instructions given for completion of the index cards.

The patients' index is an arrangement of cards containing the name and hospital number of the patient. It is the key needed to locate any information in the medical record department pertaining to a patient.

The physicians' index is a record of the work done and the end results obtained by physicians practicing in the hospital. It is a strictly confidential record and should be available for inspection only to the governing board of the hospital through the administrator, the medical audit committee, the credentials committee for an evaluation of the work of the individual physician or to the physician himself for a review and analysis of his own work.

Disease and operation indexing is the last major step in making the medical records readily available for research. These diagnoses must conform to terminology of standard nomenclature.

The group will be divided into three classes--one for beginners, one for intermediate, and one for advanced. During the first hour the students will be given a test reviewing 12 coding problems.

IV. Assignment:

Coding problems have been assigned to the three groups, and "homework" will be assigned for the first day so that the papers may be brought to class the following day and corrections made.

TO CODE THE NAME OF DISEASE OR OPERATION

USE EITHER:

A. CODE NO. IN SNDO*

OR

B. CODE NO. IN ICDA*

*SNDO—THE GREEN BOOK—PHYSICIAN RESPONSIBILITY

*ICDA—VOL. I, VOL. II

Dual System of Coding

1. *Every disease results from a cause acting upon a specific organ.*

2. *Every operative procedure is performed upon a specific organ or tissue of the body.*

STANDARD NOMENCLATURE OF DISEASES AND OPERATIONS

STANDARD NOMENCLATURE OF DISEASES AND OPERATIONS

I. Topic: Basic Principles of Standard Nomenclature.

II. Objectives: The objectives of this lesson are to acquaint medical record clerks in small hospitals with:

A. Basic understanding of the principles of SNOD.

B. Basic knowledge of the arrangement and contents of SNOD.

C. An understanding of the benefits to be gained by the hospital, the physicians, and the Medical Record Department by using a disease and operations code book.

D. An appreciation of diagnostic, operative, and physicians indexes with basic instruction in setting up these indexes and how to use them.

E. An appreciation of the importance of coding and indexing all diagnoses and all operations on each clinical record.

III. Activities and Procedures:

A. Purposes for using a disease and operative nomenclature.

B. Dual system of coding.

C. Derivation of code numbers.

D. Supplementary terms.

E. Presentation of examples and exercises.

IV. Assignment: Memorize the first digits of the topographical codes and procedural codes.

V. Bibliography:

Current Medical Terminology

"Efficiency in Hospital Indexing of the Coding Systems of the International Statistical Classification and Standard Nomenclature of Diseases and Operations," _Journal of the American Association of Medical Record Librarians_ 30:95-111, 129, June, 1959.

Huffman, Edna K., *Manual for Medical Record Librarians*, Physicians' Record Co., Berwyn, 1962.

Knutti, Sarah H., "Precise Terminology," *Hospitals* 33:63, 66, November, 1959.

McGuire, Helen, "Service from Headquarters," *Hospitals* 32:26, 28, March, 1958.

THE STANDARD NOMENCLATURE OF DISEASES AND OPERATIONS

In order to facilitate research projects on diseases treated in a hospital, a nomenclature of diseases must be carefully followed. The Standard Nomenclature of Diseases and Operations is a systematic compilation of terms of diseases, conditions, and operations which affords information regarding the causative agent and its bearing upon the part of the body affected. All related diseases appear under one heading. Manifestations and symptoms are clearly differentiated.

There are three distinct purposes for using a disease and operative nomenclature. They are:

1. To encourage and assist the physician to use specific, standard terminology in his diagnoses and to clearly distinguish between disease conditions and manifestations of the disease.
2. To provide easily accessible tools for the compilation of valid disease, operative, and mortality statistics.
3. To simplify the effort in providing material for research.

The Standard Nomenclature of Diseases and Operations (SNDO) is a listing of the majority of preferred disease terms. They are arranged as follows:

1. Anatomical system.
2. Organ or part within the system.
3. Specific part of the organ.
    A. Each part of the organ is subdivided into etiological groups.

The Standard Nomenclature of Diseases and Operations is a dual system of coding which is based upon the following principles:

1. Every disease results from a cause acting upon a specific organ or tissue of the body.
2. Every operative procedure is performed upon a specific organ or tissue of the body.

The Standard code number appears on the left side of the page. The italicized numbers, enclosed in parentheses, at the right of the disease terms are code numbers used for the "Abridged Statistical Classification" listed in the appendix (pp. 851-964).

Parentheses within the diagnostic wording appear to designate synonymous terms.

Example: x88-0421 Sensory, neural deafness (high frequency).

Semicolons designate terms which are not synonymous but which are so closely related that they do not require a specific code number.

Example: 26x-912 Degenerative joint disease, multiple, due to unknown cause; osteoarthritis.

Non-Diagnostic Terms for Hospital Record (pp. 481-482) are used to code non-specific conditions.

Supplementary Terms (pp. 484-500) are used to code conditions which are not true diagnoses. They must never replace a diagnostic code. They must be used with a complete diagnostic code. If no disease is established they will be accompanied by yoo-yoo (disease undiagnosed).

1. Supplementary terms consist of 3 digits, sometimes 4, but never more.
2. Supplementary terms are never made a part of the topographical or etiological number.
3. Supplementary terms may be used with any diagnostic code listed in SNOD.

Example: 410-932.0 Rheumatic heart disease, inactive

499 Aortic valve stenosis

407 Mitral incompetency

498 Mitral stenosis

The Standard Nomenclature code numbers are derived as follows:

1. Every code number is two-part divided by a hyphen. To the left of the hyphen is the body part which is affected by the disease or the body part which is operated upon. To the right of the hyphen is the cause of the disease or operation performed.
2. Disease codes must have a topography (body part) to the left of the hyphen and an etiology (cause of disease or injury) to the right of the hyphen.
3. The minimum number of digits in the disease code is six--three to the left of the hyphen and three to the righ
4. The maximum number of digits in the disease code is twelve plus a behavior letter.

5. Operation codes must have a topography (body part or anatomical site) to the left of the hyphen and a procedure (operation) to the right of the hyphen.

6. Operative codes consist of at least five numbers--three to the left of the hyphen and two to the right of the hyphen. The codes may have more than five numbers but not less.

Topography

Topographical (body part) classification is the same for both diseases and operations. There are eleven main topographical divisions (see p. 2, SNOD). Each digit in a code number has a specific meaning.

1. The first digit is the main system, i.e., the first digit "2" is always the musculoskeletal system.

2. The second digit represents the organ or division of the system, i.e., using the first digit "2" we have the musculoskeletal system, and by adding the second digit "1" we have 21 meaning bones of the head, face, and neck.

3. The third digit is the specific part of the organ, i.e., 213 is the temporal bone.

4. Fourth and fifth digits refer to a subdivision of the organ, i.e., 2131 is the squamous portion of the temporal bone.

Etiology

Etiological classification (causes of diseases) has thirteen main categories (see p. 54 of SNOD). Each digit has a specific meaning.

1. The first digit is the general category of the disease, i.e., the first digit 3 means diseases due to intoxication.

2. The second digit is a more specific cause, i.e., 31 means intoxication due to metal.

3. The third digit is an even finer detail of the cause, i.e., 311 means intoxication due to heavy metal.

4. The fourth and fifth digits are still finer details, i.e., 3114 means intoxication due to arsenic.

The etiologic code for any given condition is the same regardless of what part of the body is affected.

Procedures

Main operative procedures are listed opposite p. 517. Operative classification numbers are listed on pp. 517-522. Procedure codes consist of two to four digits only. There are nine main divisions.

1. The first digit indicates type of procedure (incision, excision, amputation, etc.), i.e., the first digit 1 in operative procedures means excision.

2. The second digit indicates what was done following the initial approach, i.e., the second digit 2 means complete.

   Example: 782-12 Complete hysterectomy.

3. Special operative method may be indicated where applicable by appropriate third digit.

   Example: x85-022 Labyrinthrotomy with electrocoagulation.

4. Where two or more standard methods of approach may be used, the alternate approach may be indicated by the use of the letter "y."

   Example: 764-10x Prostatectomy (Suprapubic approach).

   764-10y Prostatectomy (Retropubic approach).

Incomplete diagnoses: Wherever information is lacking in a diagnosis, this may be shown by the use of the letter "y" in the position of lacking information.

Example: 360-YOO Undiagnosed disease of the lung.

6YO-8YO Undiagnosed lesion of the digestive tract.

YOO-YOO Diagnosis undetermined.

Diseases of the female genital organs occurring during the pregnant state may be indicated by changing the second digit of the topographical code in the nonpregnant state to the letter "x."

Example: 782-8091 Adenocarcinoma of the uterus (nonpregnant uterus).

7X2-8091 Adenocarcinoma of the uterus (pregnant state).

The last section of the main part of SNDO is the anesthesia section. If your hospital does not do research in anesthesia, an anesthetic index will not be necessary.

DO NOT try to improvise codes. If the diagnosis is not found listed in SNDO, ALWAYS write to the editors of SNDO to supply a code.

STANDARD NOMENCLATURE OF DISEASES AND OPERATIONS

INCOMPLETE OR MASTER CODE NUMBERS--Certain master code numbers are given throughout the body of the nomenclature. These must not be confused with incomplete diagnoses.

Generally, master code numbers are found in the sections on regions (pages 122-130), skin (pages 131-142), the musculoskeletal system (pages 146-174), the arteries (pages 216-219), the veins (pages 224-225), the lymphatic channels (page 234), and the lymph nodes (pages 235-236).

Master codes are recognizable by pyramids that take the place of digits. They begin with a digit or digits specifying the system, organ, or part involved in the topographical section of the code number and are followed by one or two pyramids and likewise in the etiological section.

There are two procedures for use with the incomplete or master code numbers.

1. COMPLETION — Insertion of the proper digit in the place of the pyramid.

   Example: "32▲-123 Tuberculosis of sinus (specify sinus)." The diagnosis stated on the medical record is "Tuberculosis of ethmoid sinus." One must refer to the topographical section 32 (accessory sinuses, page 22). The code number here for ethmoid sinuses is 323. Therefore, the completed code number is 323-123.

2. SUBSTITUTION — The digits in the master code numbers must never be changed, although sometimes substitutions must be made.

   Example: "13▲-401 Abrasion (specify region). The diagnosis on the medical record is "Abrasion of skin, right inguinal region." In the topographical section, inguinal region is 146. Here, the digit 4 is substituted for the digit 3. The completed code is 146-401.

OPEN-END CODE NUMBERS — Found only in the topographical section. They pertain to regional and general diseases involving more than one anatomical system.

Where open-end code numbers appear, the first digit is also replaced by a pyramid.

Example: ▲▲▲-011 Absence, congenital, of . . . (page 122). The diagnosis on the medical record is "Congenital absence of left forearm." The pyramids must be replaced by digits to represent the part or organ indicated. The topographical code for forearm is 083 (page 5). The completed code is 083-011.

BEHAVIOR OR MALIGNANCY CODE LETTERS--Behavior code letters are attached to the etiological numbers for neoplasma (new growths) in order to describe the histology of the tissue involved.

The behavior letters are listed at the end of category -8, etiological division, page 99.

Occasionally these letters appear as a part of the basic code number. To determine if a behavior code letter is a part of the basic code number, always refer to category -8 in the etiological division of SNOD, pp. 93-99. If the behavior code letter is listed there, it is a part of the basic code number and must be retained. NEVER DROP these letters--if dropped, the meaning will be changed.

Example: 814A Squamous cell papilloma (benign)
814 Epidermoid cardinoma (malignant) (page 94)

Whenever behavior letters do not appear as a part of the basic code number, physicians and pathologists are the only ones qualified to decide whether a code letter should be assigned.

The behavior letter I indicates the secondary or metastatic site to which the primary tumor has metastasized.

Example: Metastatic epidermoid carcinoma of the lungs
360-814I (shows metastasis to lungs)

Use of the behavior letter I when the basic code number already contains a behavior letter. The letter I follows the complete basic code number.

Example: Leiomyosarcoma of the uterus with metastasis to right ovary
788-866FI (shows metastasis to ovary)

When the basic code number does not contain a behavior letter but one has been assigned by the physician or pathologist, the behavior letter I follows the basic code number and the behavior letter assigned by the physician follows the letter I.

Example: Undifferentiated adenocarcinoma of the lungs with metastasis to the liver
680-8091IG

The decimal digit .0 indicates a primary tumor which has metastasized.

Example: Epidermoid carcinoma of the cervix with metastasis to the lungs

783-814.0 (shows primary cancer)
360-814I (shows metastatic site)

It is necessary to determine whether the behavior letter is a part of the basic code by referring to pages 72-78 before proceeding to code the disease.

DECIMAL DIGITS
(GENERALLY)

Decimals are added to code numbers to impart additional information not given in the basic code number. They are most frequently found in the Etiological Classification, however, they are found in system 2 in the Topographical Classification, page 21. The decimal digits found on page 21 indicate accessory structures to bones, joints, and muscles.

Example: Periostitis, acute of humerus
230.4-100 (page 149)
The decimal digit four indicates the periosteum.

Decimal digits added to etiological numbers indicate end results of disease processes. They mean practically the same in every category EXCEPT category -8 (see page 9--this exercise).

Example: Fistula of larynx due to infection
330-100.3 (page 183)
The decimal digit three indicates fistula.

Structural and functional changes indicated at the end of an etiological section may be used arbitrarily.

Example: Fistula of larynx due to infection
330-1x3

A good rule to follow is to use the complete code as in the first example of fistula of the larynx above. Use the "x" code when there is a need for two codes in order to express two decimal digits.

Example: Fistula of the larynx with cyst formation
due to infection
330-1x3.8

The decimal digit .0 is also used to indicate chronicity.

Example: Pleurisy, acute 370-190
Pleurisy, chronic 370-190.0

DILATION AND CURETTAGE

The operative procedure, dilation and curettage, is coded 785-104.

The digit 4 in the third position indicates curettage. This code number is used when the procedure is not associated with pregnancy, removal of retained placenta, placental fragments, or membrane.

The operative procedure to terminate a pregnancy (therapeutic abortion) is coded 7x5-104.

This code must not be used for dilation and curettage for an incomplete abortion. In an incomplete abortion, the placenta and its membrane or their fragments are removed. Parts of the fetus or the entire fetus may be removed. Codes for removal of fetal structures are:

of embryo	790-12
of placenta fragment.	.7942-12
of retained placenta.	794-12
of retained placenta and membrane .	.7941-12

Correct coding of the above conditions is desired in order to furnish statistical information about pregnancy loses, etc., through the operative index.

The clinical entity for which the procedure was performed must be determined before you can accurately classify and code dilation and curettages.

BASIC HUMAN ANATOMY

BASIC HUMAN ANATOMY

I. Topic: Basic Human Anatomy.

II. Objectives: To present the basic elements of human anatomy.

III. Procedures and Activities: Lecture.

   A. Introduction.

   B. Regions and Landmarks of the Body.

   C. The Brain.

   D. The Heart.

   E. Circulation.

   F. Tracheobronchial Tree.

   G. Lungs and Pleura.

   H. Gastrointestinal Tract.

   I. The Spleen.

   J. Kidneys.

   K. Endocrine Glands.

   L. Pelvis.

   M. Lymphatic System.

   N. Blood.

IV. Materials and Resources: Movie, Models, Diagrams.

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"Human Body: Circulatory System (14 min.), Digestive System (14 min.), Excretory System (14 min.), Respiratory System (14 min.), Skeleton (14 min.)," Mountain Plains Educational Media Council Film Catalog, 1966-68, University of Colorado, Boulder.

BASIC HUMAN ANATOMY

I. Introduction.

A. Anatomy is the study of structure (morphology) and is commonly carried out by dissection.

1. Systemic anatomy is the study of the structure of the body systems.

2. Regional anatomy is the study of special areas.

3. Topographic anatomy is the study of the relationships of parts.

4. Histologic anatomy (microscopic) is the study of the structural detail of tissues as revealed by the microscope.

5. Cytology is the study of the structure of cells.

6. Developmental anatomy (embryologic) is the study of structural changes in the growing embryo.

7. Comparative anatomy is the study of comparative structure in different orders of animals.

8. Morbid anatomy (pathology) is the study of structural changes in disease.

B. Physiology is the study of function.

1. Systemic physiology is the study of the functions of the body systems.

2. General physiology is the study of basic life functions such as respiration, nerve conduction, fluid mechanics, and cellular metabolism.

C. Anatomic position is that of the standing body, face and eyes forward, arms at the sides, and with the palms forward and the thumbs away from the body. For descriptive purposes the parts of the body are always referred to in these positions regardless of the position of the part at the time of examination.

D. Terms of direction and position.

1. Anterior-posterior refer to relative positions toward the front or back of the body.

2. Ventral-dorsal refer toward the stomach or toward the back and are used to describe quadrupeds.

3. Superior-inferior are used to refer to relative positions of levels toward the head and toward the feet.

4. Cephalic-caudal mean toward the head and toward the tail, and they are used with descriptions of quadrupeds.

5. Medial-lateral refer to positions toward or away from the median plane of the body.

6. Deep-superficial refer to relative depth from the surface of the body or part.

7. Internal-external refer to relative positions toward or away from the center of the body cavities, viscera, or any spherical anatomic unit.

8. Proximal-distal refer to a relative position toward or away from the base of an appendage.

9. Oral-aboral refer to positions toward or away from the mouth and are applied to the gut tube only.

10. Central-peripheral refer toward or away from a central axis.

E. Terms of motion refer to motion about the three bodily axes: transverse, anteroposterior, and vertical.

1. Flexion-extension refer to movements about a transverse axis.

2. Rotation refers to motion about a vertical axis.

3. Pronation refers to rotation into a prone or anterior-down position while supination is rotation into the supine or anterior-up position.

4. Adduction-abduction refers to movement about an anterior-posterior axis with the motion carrying the part toward or away from the median plane.

5. Protraction-retraction refer to protruding or drawing forward versus drawing back of a muscle.

F. Planes.

1. The median plane divides the body in left and right halves and is an anterior-posterior plane through the center of the trunk.

2. The frontal plane divides the body into anterior and posterior parts and is vertical to and at right angles to the median plane.

3. A transverse plane is one which divides the body into upper and lower parts or the horizontal plane.

II. Regions and landmarks of the body.

A. Head.

1. The frontal regions are the right and left areas of the forehead.

2. The temporal regions are on either side between the orbit and the ear above the zygomatic arch up to the level of the supraorbital ridge.

3. The parietal regions are the areas on each side of the head above the ear and posterior to the frontal area and are centered on the parietal eminences which represent the greatest width of the skull.

4. The occipital regions are on the back of the head.

5. The facial regions extend inferiorly from the supraorbital ridges to the margins of the mandible and posteriorly to the ears.

6. Each facial region is subdivided into a right and left nasal region (including and surrounding the the nose), a maxillary region (including the upper jaw and the front part of the cheek), a labial region (around the lips), a buccal region (the flaccid part of the cheek at the side of the face), a mandibular region (around the lower jaw), an orbital region (surrounding the eye), and the submandibular region (between the margin of the mandible and the hyoid bone of the neck.

B. Landmarks of the head region.

1. The external occipital protuberance is the midline bone prominence which is palpable at the back of the head.

2. The glabella is the midline triangular prominence projecting between the orbital ridges at the root of the nose.

3. The frontal eminences are the bilateral prominences of the forehead.

4. The parietal eminences are the widest projecting masses on either side of the head in the parietal region.

5. The supraorbital and infraorbital ridges are the margins of the orbit above and below the eye.

6. The zygoma is the bony arch extending from the cheek to the tragus of the ear.

7. The mastoid process is the downward pointing blunt bony projection behind the ear.

8. The mandibular angle is the angular turning point at the posterior aspect of the mandibular margin.

9. The external auditory meatus is the opening in the ear canal.

10. The tragus is the skin-covered cartilaginous prominence projecting in front of the external auditory meatus.

C. Neck.

1. When viewed from the side, the quadrilateral neck surface from the margin of the mandible to the clavicle inferiorly is divided by the prominence of the sternomastoid muscle into the anterior and posterior triangles.

2. The anterior triangle is limited in front by the midline of the neck, and the posterior triangle is limited posteriorly by the margin of the trapezins muscle.

D. Landmarks of the neck.

1. The hyoid bone is palpable as a U-shaped prominence at the receded angle below the chin.

2. A centimeter below the hyoid bone is the laryngeal prominence (Adam's apple) of the thyroid cartilage. The contour of this cartilage may be followed by lateral palpation.

3. A slight anterior prominence two fingerbreadths below the laryngeal prominence is the cricoid cartilage and immediately below this is the isthmus of the thyroid gland.

E. Thorax (chest) houses the lungs and mediastinal contents.

1. The thorax is marked in midline anteriorly by the sternum, the upper border of which is the jugular notch and the lower border the infrasternal notch to which the xiphoid process is attached.

2. The sternal angle is the transverse ridge at the junction of the manubrium with the sternum proper.

3. The costal cartilages attach to either side of the sternum below the clavicle and are palpable through the skin in most subjects.

4. The rib cartilage attaching at the sternal angle is the second and the intercostal spaces are designated by the numbered rib above each.

5. The surface muscles (pectoral and back) attach the upper extremity to the thorax.

6. The posterior border of the pectoral muscle mass and the anterior border of the back muscle (latissimus dorsi) together with the apex under the arm define the axilla (armpit).

7. The thorax is limited below, and separated from the abdomen by the diaphragm.

F. Landmarks of the thorax.

1. The nipple in the male overlies the 4th interspace, and as a dermatome landmark identifies the 4th intercostal (thoracic) nerve.

2. The sternal angle marks, among other things, the upper border of the heart and the position of the 2nd rib.

3. The midclavicular (mammary) line is a vertical line running from the midpoint of the clavicle through the nipple.

4. The costal margins are formed by the lower border of the rib cage and define the junction of the thorax and abdomen.

G. Back.

1. The spinous processes project along midline from the suboccipital region to the sacrum.

2. The vertebra prominens is palpable from above and is the spinous process of the 7th cervical vertebra.

3. The scapula is identifiable by palpation or is visible over the lateral aspects of the upper back. This is the posterior representative of the shoulder girdle and serves to fix with considerable mobility the muscle mass which attaches the upper extremity to the back, head, and neck.

4. The trapezius is the muscle mass extending from the head, neck, and spinous processes to the border of the scapula and provides the principal soft tissue bulk of the upper back.

H. Landmarks of the back.

1. The iliac crests are palpable at the sides of the middle section of the back and identify the transverse plane which meets the 4th lumbar vertebral spinous process in midline.

I. Abdomen. The abdominal wall is bounded superiorly by the costal margins, laterally by the anterior superior iliac spines and the iliac crests, and inferiorly by the pubis.

1. The lines extending from the anterior superior iliac spines to each side of the pubis are formed by the inguinal ligaments and mark the inguinal regions (groins).

2. The umbilicus marks the center of the abdomen with a depressed vertical line extending above and below called the linea alba.

3. The muscle ridges aligned vertically along the sides of the linea alba are produced by the rectus abdominus muscles which extend from the costal cartilages near the sternum to the pubis on either side.

4. The regions of the abdomen include epigastric which lies between the costal margins below the xiphoid and above the umbilical region, the umbilical region surrounding the umbilicus, and the hypogastric region which lies between the umbilical region and the pubis.

5. At the sides are the hypochondriac regions underlying the ribs, the lumbar regions to the sides of the umbilical region, and the inguinal (iliac) regions at the sides of the hypogastrium. The inguinal regions of the abdomen are limited below by the inguinal lines.

J. Landmarks of the abdomen.

1. The costal margins and inguinal ligaments mark the upper and lower boundaries of the abdomen.

2. The epigastrium overlies the stomach particularly to the left.

3. The left hypochondrium houses the spleen, the right hypochondrium houses the liver.

4. The midinguinal line is continuous above with the midclavicular line.

K. Pelvis: The pelvic region is the space limited by the pelvic bones (sacrum, ilium, ischium, pubis) which form the pelvic girdle.

  1. The muscles attaching the lower extremity to the body arise primarily from the pelvic bony components.

  2. The perineum is the space between the tip of the coccyx and the pubis, and it surrounds the anus and the urogenital surface structures (vulva in the female and penis and scrotum in the male).

L. Extremities.

  1. The upper extremity includes the arm from shoulder to elbow, the forearm from elbow to wrist, the carpus or wrist, and the hand.

  2. The upper extremity is attached to the shoulder girdle, thorax, and back by muscles.

  3. The lower extremity is made up of the thigh from hip to knee, the leg from knee to ankle, the tarsus or ankle, and the foot. It is attached by the bulky gluteal muscles of the buttock and by other deeper muscles to the pelvis and axial skeleton.

III. The Brain.

A. The brain is that part of the central nervous system which lies within the cranial cavity. It is divided into three main regions:

  1. The brainstem is the most inferior region and comprises the medulla oblongata, pons, midbrain, and diencephalon.

  2. The cerebellum lies posterior and superior to the brainstem and is a large bilobular structure with the surface thrown into folds. It consists of two lateral hemispheres and median unpaired vermis and is connected to the medulla, to the pons, and to the midbrain.

  3. The cerebrum is a greatly expanded portion lying superior to and almost completely covering the brainstem and the cerebellum.

B. The cerebral hemispheres constitute a large part of the brain, forming a bilobular mass completely covering the other portions of the brain.

  1. The hemispheres are separated by a deep cleft called the longitudinal cerebral fissure.

  2. Each contains a cavity, the lateral ventricle, which communicates with the third ventricle by an opening, the interventricular foramen of Monro.

  3. The two hemispheres are connected across the midline by a broad band of white fibers called the corpus callosum.

  4. Each hemisphere consists of an outer layer of gray matter, the cerebral cortex, which encloses the inner white matter.

  5. The surface of the cerebrum is thrown into many folds called convolutions (gyri). These are separated by fissures and sulci.

  6. The cerebrum is divided into:

    a. The frontal lobe, comprising the anterior portion.

    b. Parietal lobe, comprising the superior lateral.

    c. Temporal lobe, comprising the inferior lateral.

    d. Occipital lobe, comprising the posterior portion.

    e. Insula (central) lobe, lying inferior to the frontal lobe and internal to the temporal lobe.

C. Three membranes, the meninges, enclose the brain and the spinal cord. These are the dura matter, the arachnoid, and the pia matter.

  1. Over the surface of the brain, folds of the dura matter dip into various parts forming partitions.

  2. The cerebral spinal fluid fills the ventricles of the brain, the central canal of the spinal cord, and the subarachnoid and subdural spaces. This is a clear, colorless fluid of watery consistency.

D. The spinal cord is a portion of the central nervous system lying outside the cranial cavity.

  1. It is located within the vertebral canal of the spinal column.

2. It is the conducting cylindrical structure extending from the foramen magnum to the second lumbar vertebra. The cord consists of a series of segments, each segment giving rise to a pair of spinal nerves and each of these is attached to the cord by two roots, the dorsal and ventral roots.

3. Superiorly, the spinal cord is continuous with the medulla of oblongata.

IV. Heart.

A. The heart occupies the mediastinum in an area landmarked on the anterior chest wall from the sternal angle above to the xiphosternal junction below and from one centimeter to the right of the parasternal line on the right to within the nipple line on the left.

1. The heart lies within the pericardial cavity which is limited externally by the serous (mesothelial) layer of the pericardium.

2. The immediate covering of the heart is the serous epicardium which is continuous with the parietal lining of the pericardium.

3. The heart is made up of four chambers, a right and a left atrium and a right and left ventricle.

B. The pulmonary system conveys the blood to the lungs and back to the heart.

1. The right ventricle is the muscular part which pumps blood into the pulmonary artery.

2. The blood is distributed through the pulmonary artery successively to the arterial, capillary, and venous channels of right and left lungs and returned to the left atrium of the heart via the pulmonary veins.

3. The left atrium delivers the blood to the left ventricle via the mitral valve.

C. The general somatic system conveys the blood to general body parts and returns it to the heart.

1. The left ventricle pumps blood into the aorta by which it is distributed to the general body and to the heart itself via the coronary circulation.

2. The coronary vessels open from the right and left anterior aortic valvular cusp pockets to distribute blood to the heart wall itself.

3. Venous blood from the heart wall is returned largely through the great cardiac vein which returns the blood to the right atrium.

4. The blood delivered to the general body via the aorta returns to the heart through the superior and inferior vena cavae by which it is carried to the right atrium.

5. From the right atrium it is pumped via the tricuspid valve to the right ventricle, the arbitrary starting point.

V. Circulation.

A. Heart.

1. The oxygenated blood from the lungs is returned to the left atrium of the heart via the pulmonary veins.

2. The left atrium delivers the blood to the left ventricle and the left ventricle then pumps the blood into the aorta by which it is distributed to the general body and to the heart itself.

B. Arterial system.

1. From the arch of the aorta, the subclavian, innominate arteries, and carotid arteries arise, through which blood is delivered to the upper extremities and to the head and neck, including the brain.

2. The aorta then descends behind the heart into the abdominal cavity.

3. The celiac axis consists of several arteries which supply the stomach, spleen, part of the small intestine, the liver, and the gallbladder.

4. Further down, the renal arteries divide off to supply the kidneys.

5. The superior and inferior mesenteric arteries supply the small and large intestine.

6. Just below the umbilicus, the large abdominal aorta is divided into the right and left common iliac arteries, and these again are divided into the internal and external iliac arteries, right and left.

    a. The internal iliac arteries supply the structures of the pelves.

b. The external iliac arteries supply the lower limbs.

7. The main artery in the lower limbs is the femoral which behind the knee becomes the popliteal artery, which again divides into the anterior and posterior tibial arteries.

C. Venous System.

1. The veins usually follow the paths of the arteries and often have similar names.

2. The walls of the veins are thinner than those of the arteries.

3. The veins are the passive, drainage, or return site of the cardiovascular system.

4. The venous blood contains less oxygen and a higher content of carbon dioxide, except in the pulmonary veins where this situation is reversed.

5. The venous blood contains less nutrient material than arterial blood, except in the portal, hepatic, and terminal parts of the inferior vena cavae.

6. The capillary bed ordinarily connects the arterial system to the venous system. This is a network of endothelial tubes.

7. The capillary is the site of exchange between the vascular system and the cellular elements and intracellular spaces.

8. The arteries bring blood to the capillary bed and the veins take it away.

VI. Tracheobronchial Tree.

A. The trachea (windpipe) extends from the cricoid cartilage some 11 centimeters to the level of the 5th thoracic vertebra.

1. It divides into the right and left bronchi.

2. It is attached to the lower border of the cricoid cartilage by the cricotracheal ligament and is made up of 16 to 20 horseshoe-shaped hyaline cartilaginous rings separated by fibrous membranes.

3. At the posterior open part of the rings the trachea is supported by fibrous membrane and smooth muscle.

B. Bronchi.

1. The right bronchus separates into a superior lobe bronchus which passes above the pulmonary artery.

2. The middle lobe bronchus and the inferior lobe bronchus each pass to a corresponding lobe of the lung.

3. The superior bronchus divides into three secondary bronchi each defining with its associated lung tissue a bronchopulmonary segment.

4. Likewise, the middle bronchus divides into two branches and the inferior bronchus into four.

5. The left bronchus divides into a superior lobe bronchus which then divides into two divisions.

C. Mediastinum.

1. The septal division between the right and left chest cavities is the mediastinum and contains the trachea, esophagus, heart, and great vessels, and lesser structures.

2. The septum bridges between vertebral column and sternum.

VII. Lungs and Pleura.

A. Lungs are the light spongy organs of respiration.

1. They occupy the right and left chest cavities and fill the pleural portion of the thoracic cavity.

2. They extend from the diaphragm to a point just above the clavicles and lie against the ribs both anteriorly and posteriorly.

3. The primary bronchi and pulmonary blood vessels enter each lung through a slit on its mesial surface, the hilum.

4. The primary bronchi and pulmonary blood vessels are bound together by connective tissue to form the root of the lung.

5. The broad inferior surface of the lung, the base, rests on the diaphragm, and the point upper margin is the apex.

6. The left lung is divided by fissures into two lobes, upper and lower. The right lung is divided into three lobes: superior, middle, and inferior.

7. Each lung consists of millions of alveoli with their related ducts and bronchilles and bronchi.

B. The visceral pleura covers the outer surfaces of the lungs and adheres to them much as the skin of an apple adheres.

C. The lungs through the alveoli furnish a place where air can come in close enough contact with blood in the capillaries for a gaseous exchange to occur between the two.

VIII. Gastrointestinal Tract.

A. The digestive tube is a musculomembraneous tube about 9 meters long, extending from the mouth to the anus.

1. It is lined by mucus membrane.

2. The tube commences with the mouth where mastication takes place. Then in order are the organs of deglutition, the pharynx and the esophagus, which convey the food to the stomach.

3. The food is stored in the stomach for a time and the first stages of digestion take place there.

4. Next is the small intestine which is divided into three parts: the duodenum, the jejunum, and ileum. Here the process of digestion is completed and the resulting products are absorbed into the blood and lacteal vessels.

5. Following is the large intestine which is made up of the cecum, colon, rectum, and anal canal. The anal canal terminates on the surface of the body at the anus.

B. Abdomen is the largest cavity in the body.

1. The upper boundary is formed by the diaphragm which extends as a dome over the abdomen and is a muscular organ.

2. The lower boundary is formed principally by the diaphragm of the pelvis.

3. The internal surface of the abdominal wall and the exposed viscera is covered by the serous membrane, peritoneum.

a. This is the largest serous membrane in the body.

b. It consists of a closed sac.

C. The stomach is the most dilated part of the digestive tube and is situated between the end of the esophagus and the beginning of the small intestine.

   1. The stomach has two curvatures, the lesser and the greater curvature.

   2. The lesser curvature is in general the superior portion of the stomach, and the greater curvature is the inferior portion of the stomach.

   3. The shape and position of the stomach are greatly modified by changes within itself so that no one form may definitely describe it.

D. The small intestine is a convoluted tube extending from the pylorus to the colic valve where it ends in the large intestine.

   1. It is about 7 centimeters long and is connected to the vertebral column by a fold of peritoneum, the messentery.

   2. The small intestine is divided into the duodenum, the jejunum, and the ileum.

E. The large intestine extends from the end of the ileum to the anus.

   1. It is about 1.5 meters long.

   2. The cecum, a large blind pouch situated below the colic valve, is the commencement of the large intestine.

   3. The appendix is a long, narrow, worm-shaped tube which starts from the apex of the cecum and varies from 2-20 centimeters in length.

   4. The colon is divided into four parts: the ascending, the transverse, the descending, and the sigmoid.

   5. The rectum is continuous above with the sigmoid colon while below it ends in the anal canal. The anal canal is the terminal portion of the large intestine and begins at the level of the apex of the prostate and ends at the anus.

F. The liver is the largest gland in the body and is situated in the upper and right part of the abdominal cavity.

   1. It weighs from 1200 to 1600 grams, and its consistency is that of a soft solid. It is easily lacerated and highly vascular. It is dark reddish-brown in color.

2. The liver has four lobes and is covered by peritoneum.

3. The visceral surface is concave and contains several fossae and impressions for neighboring viscera.

G. The gallbladder is a pear-shaped musculomembraneous sac which is lodged on the undersurface of the right lobe of the liver.

1. The gallbladder is 7 to 10 centimeters in length.

2. The cystic duct is the duct leading from the gallbladder into the common bile duct where it is joined by the hepatic duct from the liver.

3. Secretions from the gallbladder and liver are passed through the cystic duct, hepatic ducts, and common bile duct, and then into the duodenum where it takes part in the digestive process.

H. The pancreas is long and irregularly, prismatic in shape.

1. Its broad right extremity is called the head and is connected to the main portion of the organ by a slight constriction of the neck.

2. Its left extremity tapers to form the tail.

3. It varies in length from 12 to 15 centimeters.

4. The pancreas is anteriorly related to the transverse colon and posteriorly to the inferior vena cava, the common bile duct, the renal veins, and the aorta.

5. The tail of the pancreas extends to the left as far as the lower part of the gastric surface of the spleen.

6. The pancreatic duct extends transversely from left to right through the substance of pancreas and transports pancreatic juice to the duodenum where its several enzymes aid in the digestion of proteins, carbohydrates, and fats.

7. The pancreas is a gland of both external and internal secretion.

   a. The endocrine secretion is called insulin and is an important factor in the control of sugar metabolism in the body.

b. The islets of Langerhans are responsible for the secretion of insulin.

IX. The spleen is situated principally in the left hypochondriac region and lies between the fundus of the stomach and the diaphragm.

A. The spleen is oblong, flattened, soft, and very friable and highly vascular with a darkish, purplish color.

B. During fetal life and shortly after birth, it gives rise to new red blood corpuscles.

C. It is supposed to be an organ for the destruction of red blood corpuscles and preparation of new hemoglobin from the iron that is set free.

D. The size and weight of the spleen are liable to extreme variations. In an adult it usually measures about 12 centimeters in length, 7 centimeters in breadth, and 3 to 4 centimeters in thickness. It weighs about 100 to 150 grams.

X. The kidneys are situated in the posterior part of the abdomen, one on either side of the vertebral column behind their peritoneum and surrounded by a mass of fat and loose areolar tissue.

A. Their upper extremities are on the level with the third lumbar vertebrae.

B. Each kidney is about 12 centimeters in length, 6 centimeters in breadth, and more than 2.5 centimeters in thickness. They weigh from 120 to 170 grams.

C. They have a characteristic form. The posterior surface of each kidney lies upon the diaphragm, the Psoas major muscle, and the Quadratus Lumborum. The diaphragm separates the kidney from the pleura.

D. The right kidney is related anteriorly to the surface of the liver. The anterior surface of the left kidney makes contact with the body of the pancreas.

E. The adrenal glands sit on the superior medial borders of the kidneys.

F. The urine is produced in the kidneys by the glomeruli in the renal, kidney cortex, and is then excreted into the renal pelvis and then into the ureters.

G. The ureters are two tubes which convey the urine from the kidneys to the urinary bladder.

1. Each commences within the sinus of the corresponding kidney as a number of short cup-shaped tubes, calyces.

2. The calyces join to form the renal pelvis.

3. The ureter varies in length from 28 to 34 centimeters. It is a thick-walled, narrow tube, and it opens into the fundus of the bladder after running downward and medialward on the Psoas major muscle and entering the pelvic cavity.

XI. The endocrine glands in the human body are the anterior and posterior pituitary glands, thyroid gland, adrenal glands, the testes, the ovaries, the pancreas, and the parathyroid glands.

A. They are ductless glands and secrete specific secretions, hormones, into the blood stream.

1. Hormones are chemical messengers and only certain organs or types of cells are able to respond to the stimulation.

2. A specific organ responds to a particular hormone and is called a target organ.

B. The pituitary gland, hypophysis cerebri, is crouched in the sella turcica, hypophyseal fossa, of the body of the sphenoid bone of the skull. It is attached to the hypothalmus by the stalk of the infindibulum and is divided into an anterior and posterior lobe.

1. The anterior pituitary gland supplies a number of hormones and is the so-called master gland in that its secretions frequently govern activities of other endocrines.

a. It secretes a thyrotropic hormone acting on the thyroid gland and adrenocorticotropic hormone acting on the adrenal cortex.

b. It secretes two glomerotropic hormones of which one stimulates the ovarian follicles and another the lutean cells.

c. It secretes a hormone prolactin which promotes milk secretion by the mammary glands.

2. The posterior pituitary gland secretes two main hormones, the osytocin which stimulates the contraction of smooth muscle and antidiurectic hormone, vasopressin, which inhibits diuresis by the kidneys and raises the blood pressure.

C. The thyroid gland is a highly vascular organ situated at the front of the neck.

1. It consists of the right and left lobes connected across the midline by a narrow portion of the isthmus.

2. The thyroid gland secretes the hormone thyroxin which is important in the control of the metabolism of the body.

D. The parathyroid glands are small brownish-red bodies situated on the posterior surface of the lateral lobes of the thyroid glands. They secrete a hormone called parat-hormone necessary for calcium and phosphorous metabolism.

E. The adrenal glands are located on the superior pole of the right and left kidneys.

1. The adrenal gland is divided into the cortex and medulla.

2. The adrenal cortex elaborates several hormones essential to the main stem of life. They take part in the regulation of water and electrolyte balance, and in many aspects of carbohydrate metabolism and muscular efficiency.

F. The testes serve two roles, one hormonal, the other reproductive.

1. They synthesize and secrete testosterone which is responsible for the development of secondary sexual characteristics in the male.

2. They develop spermatozoa for the fertilization of the female ovum.

G. The ovaries secrete four types of hormones: estrogens, gestagens, relaxin, and androgens.

1. The primary activity of estrogens is the development of the secondary sexual characteristics of the female.

2. The gestagens or the progesterone acts mainly on the genital system and has some role in the development and function of the breast.

XII. Pelvis.

A. The pelvis resembles a basin and is composed of four bones: the two hip bones laterally and in front and the sacrum and coccyx behind.

2. The female urethra is about 4 centimeters long and extends from the internal to the external urethral orifice. It is placed behind the symphysis pubis embedded in the anterior wall of the vagina.

E. The prostate gland is a firm, glandular and partly muscular body which is placed immediately below the internal urethral orifice and around the commencement of the urethra in the male.

1. It is situated in the pelvic cavity below the lower part of the symphysis pubis and in front of the rectum through which it may be distinctly felt when enlarged.

2. It is about the size of a chestnut and somewhat conical in shape. The greater part of the base is directly continuous with the bladder wall and the urethra penetrates it nearer its anterior surface than its posterior.

3. The prostate is perforated by the urethra and the ejaculatory ducts.

F. The testes are two glandular organs which produce the semen.

1. They are suspended in the scrotum by their spermatic cords.

2. The ductus deferens, vas deferens, is the excretory duct of the testes and is the continuation of the canal of the epididymis.

3. The semen produced in the testes passes through the epididymis into the vas deferens and enters the prostate behind the bladder together with the duct of the seminal vesicle to form the ejaculatory duct.

G. The female genital organs consist of the uterus with right and left ovaries and the vagina.

1. The uterus is a hollow thick-walled muscular organ situated between the bladder and the rectum. The Fallopian tubes open into its upper part, one on either side. Below its cavity communicates with that of the vagina.

2. When the ova are discharged from the ovaries, they pass through the uterine cavity by the uterine tubes, Fallopian tubes. If an ovum is fertilized, it embeds itself in the uterine wall and is retained in the uterus until prenatal development is completed.

3. The uterus measures about 7 centimeters in length and 5 centimeters in breadth in its upper part. It is divided into the fundus and the cervix.

    a. The fundus is the upper most part of the uterus into which the uterine tubes open.

    b. The cervix is the lower constricted segment of the uterus. The cervix is about 2.5 centimeters long and the vagina is attached obliquely around the center of the periphery of the cervix.

4. The uterus is supported by ligaments and the pelvic diaphragm.

5. The vagina is directed upwards and backwards so that its axis forms a 90° angle with the axis of the uterus. Its length is about 6 to 7.5 centimeters along its anterior wall and 9 centimeters along its posterior wall.

XIII. The Lymphatic System.

A. The lymphatic system consists of:

1. Extensive capillary network which collects lymph in the various organs and tissues.

2. The elaborate system of collecting vessels which carry the lymph from the lymphatic capillaries to the bloodstream opening into the great veins of the roots of the neck.

3. A number of firm, round bodies called lymph nodes which are placed like filters in the paths of the collecting vessels and certain lymphatic organs which resemble lymph nodes, e.g., tonsils.

4. The spleen.

5. The thymus.

B. The lymph nodes are small, oval or bean-shaped bodies situated in the course of lymphatic and lacteal vessels so that lymph and chyle pass through them on their way to the blood.

1. Lymph nodes are found throughout the body and play a very important part in the spread of cancer.

2. Lymph nodes are often biopsied by the surgeon when he is looking for cancer.

C. Lymph is found only in the closed lymphatic vessels.

  1. It is a transparent, colorless, or slightly yellow watery fluid.

  2. The thoracic duct conveys the greater part of the lymph in the blood.

  3. In general, the lymphatic vessels follow the blood vessels.

  4. The lymph glands serve in part as filters arresting solid particles of bacteria which may be taken up by the lymph vessels and in part as the sources of origin for those lymph corpuscles which are called lymphocytes and become white blood corpuscles when added to the blood stream.

  5. The lymphatic system plays an important role in all types of infection and inflammation.

XIV. Blood.

A. Blood consists of a fluid medium, plasma, in which are suspended minute structures, the formed elements of the blood which include red blood corpuscles, white blood cells, and platelets.

B. The blood plasma is the fluid after the formed elements have been removed by centrifugation.

  1. It is a clear, somewhat viscous and slightly yellowish fluid which is rich in dissolved proteins.

  2. When blood clots, one of these proteins, fibrinogen, is precipitated out as very minute threads, fibrin.

C. The red blood corpuscles, erythrocytes, are biconcave discs.

  1. They have a pale yellowish color when viewed under the microscope in a thin film of fresh blood.

  2. The primary function of the red cells is to maintain in circulation the high concentration of hemoglobin which is present within the red blood cells and is essential for the transport of the large amount of oxygen necessary for the respiration of the tissue.

D. The white corpuscles, leukocytes, are of different sizes and much less numerous than the red blood corpuscles.

1. In a healthy person, there are from 7,000 to 12,000 per cubic millimeter of blood.

2. The white corpuscles are true cells having, in contrast to the red blood cells, a nucleus as well as cytoplasm.

3. There are several different types of white corpuscles.

4. The leukocytes are actively ameboid cells, and, by virtue of their phagocytic or other properties, they may assist in arresting invasion of microorganisms or in the repair of tissues.

E. The platelets consist of masses of protoplasm with central granular cytoplasm without a nucleus.

   1. Their number varies greatly in a normal person from 200,000 to 800,000.

   2. They are concerned in the maintenance of the integrity of the vascular endothelium; hence, in preventing the escape of blood from the blood vessels. This is important to the coagulation of blood.

MEDICAL TERMINOLOGY

MEDICAL TERMINOLOGY

I. Topic: Medical Terminology.

II. Objectives:

A. To acquire the ability to pronounce and spell medical words.

B. To develop knowledge of the elements of medical words.

C. To acquire the ability to recognize word parts and to detect meanings of unfamiliar medical words.

D. To use a medical dictionary intelligently.

III. Activities and Procedures:

A. Lecture on word building.

1. Discussion of contents found in frames 1-88. The program and the word-building system. Words formed by:

   a. Word root--foundation of the word.
   b. Compound words can be formed when two word roots are used to build words.
   c. Combining form--root word plus a vowel.
   d. Prefix--the word part that goes before a word to change its meaning.
   e. Suffix--the word part that follows a word root.

2. Unusual letter combinations.

a.	pn - n	pneumonia
b.	ch - k	chemistry; cheiloplasty
c.	gn - n	gnat; gnathalgia = na-thal' ge-ah
d.	ph - f	phobia; diphtheria
e.	ps - s	psittacosis; psychosis
f.	rh - r	rhonchus
g.	cn - n	cnemis = ne'mis
h.	pt - t	ptosis

3. Knowledge of singular and plural endings peculiar to Greek and Latin words will prevent many errors. Some common ones are:

Singular		Plural	
a	axilla	ae	axillae
ax	thorax	aces	thoraces
is	diagnosis; crisis	es	diagnoses; crises
ma	myoma; fibroma	mata	fibromata; myomata (also fibromas)

Singular		Plural	
on	phenomenon; ganglion	a	phenomena; ganglia
nx	phalanx; larynx	ges	phalanges; larynges
um	antrum; septum	a	antra; septa
us	bacillus; bronchus	i	bacilli, bronchi

B. Drill using programmed text.

C. Classroom drills and reviews.

1. Emphasis will be on the meaning of prefixes, roots, and suffixes.
2. Analysis of the basic structures of medical words.
3. Reference to medical dictionary for new words--pronunciation, spelling, analysis, and definition.
4. Students will be required to memorize some of the most common components.
5. Application of acquired knowledge by combining forms and building medical words.

D. Written test exercises.

IV. Materials, Resources, and Bibliography.

A. Textbook: Smith, Genevieve L. and Davis, Phyllis E., Medical Terminology, A Programed Text, 2nd Ed., John Wiley and Sons, New York, 1967.

B. Overhead projector and transparencies of oral drills.

C. Bibliography:

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V. Assignment: Textbook.

Frames 88-664

Exercises	#1	88-524
	#2	oral spelling
	#3	525-711
	#4	spelling and definitions
Urinary system		612-634

Frames 665-1245

Digestive system		664-711
Exercises	#5	712-875
	#6	spelling and definitions
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Frames 1247-1397

Respiratory system		1272-1293
Exercise	#9	1232-1397
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Frames 1398-1535

Organs of special senses
Cardiovascular terms
Female genital system

MEDICAL TERMINOLOGY

INTRODUCTION

Medical terminology is the professional language of those who are directly or indirectly engaged in the art of healing. Medical words are difficult to spell and pronounce as they are taken from many languages. At times they may stand for something to which they seemingly do not apply. The student may be bewildered at first by the various languages from which the words are derived and it may tax her ability to understand their meaning.

The earliest tradition of medicine, as we know it, was founded by the Greeks. When the Romans conquered the Greeks, Latin became the universal language of the educated and scientific people. Greek learning was revived in the 15th century and many of the older terms which had been lost were then restored to our medical vocabulary. The majority of medical terms are of Greek or Latin ancestry; others have been adopted from modern languages, especially from German and French. The dominance of Greek and Latin need not disturb you. A knowledge of the components--prefixes, suffixes, and root words or stems--can be acquired with reasonable effort and study.

To properly understand medical language, the student should learn to analyze the words, take them apart, and learn their meaning. While it is necessary to memorize word roots, prefixes, and suffixes, it should be remembered that this is merely the first step in learning a new vocabulary and a better understanding of the medical language. By learning to analyze medical words, taking them apart and learning their origin and meaning, medical terminology will be a fascinating subject.

PURPOSE OF MEDICAL TERMINOLOGY

Medical terminology exists primarily for the purpose of communication in medicine. Physicians with the use of this special vocabulary can name and describe the conditions and their diagnoses more precisely and accurately than by using only the terms of the English language. With this vocabulary they describe the human body, its functions, its normal and abnormal conditions, the diseases and injuries which affect the body, and various methods and procedures used to prevent, improve, or cure.

METHOD OF LEARNING

Emphasis will be on the meaning of word roots, prefixes, suffixes, spelling, and pronunciation.

MEANINGS of medical words can often be understood by analysis of the words.

1. Each word contains one or more roots or stems.

2. To roots or stems are affixed prefixes and suffixes. The function of the affixed part is to add information which helps in interpretation. It describes them more fully and locates them more precisely. It states how, when, and why things were done.

    endo card itis
    peri card itis

    append ectomy
    hyster ectomy

3. There is no limit to the number of stems which may be compounded together.

    panhysterosalpingo-oophorectomy

SPELLING

In the process of analyzing medical words by breaking them down into meaningful parts, no pains must be spared to acquire accuracy in spelling. A misspelled word may easily change the meaning. The misinterpretation or omission of a single letter may completely alter the meaning--even reverse it.

febrile - fever
afebrile - without fever
neurasthenia - nervous exhaustion; abnormal fatigability
neurosthenia - great nervous power and excitement

More than one way of spelling may be acceptable due to the fact that both Greek and Latin spelling of medical terms have been adopted as being correct.

anesthetic - anaesthetic
hemorrhage - haemorrhage

HOMONYMS - words which have the same sound but different meaning.

ileum - intestine
oral - mouth

ilium - flank bone
aural - ear

SYNONYMS - as in English, synonymous terms are also found and differ in one shade of meaning.

scratch - abrasion

bruise - contusion

PRONUNCIATION

Pronunciation follows no rigid rules. It depends upon which dictionary you have at hand. Since authorities do not agree, common usage must prevail. Even in the same locality and the same hospital, there will be differences in pronouncing terms. Pronunciation is sometimes a matter of nationality. For example, Americans say intes'tinal but in Britain its intesti'nal.

To take some familiar examples, you will hear:

duo de'num	duod'enum
ure'ter	ur'eter
abdo'men	ab'domen
no'menclature	nomen'clature

In these examples, the first pronunciation with the accent on the first syllable is the one most authorities prefer, and is the only one recognized by Dorland's dictionary.

The dictionary used in this Programmed Text was Tabor's Medical Dictionary, but can be used successfully with other dictionaries. There are other medical dictionaries, such as Blakiston and Stedman.

The National Association on Standard Medical Vocabulary hopes to standardize pronunciation eventually, so in the meantime follow the rule of common usage.

MEDICAL TERMINOLOGY

I. Medicine has a large vocabulary.

   A. It is far too large to learn by strict memorization.

   B. Medical terms are built up from word roots.

   C. There is need to learn a system of word building.

II. Word-building system.

   A. Word roots are the foundation of a word.

   B. Two words may be put together to form a compound word.

   C. A word root plus a vowel is a combining word such as thermo.

   D. In medical terminology, compound words are formed by a combining form, a word root, and an ending, such as thermometric.

   E. Suffix is the ending following a word root. Suffixes change the meanings of words, such as planter, planted, and planting.

   F. Prefix is the word part that precedes the word root in a word. Prefixes change the meaning of words also, such as transplant.

III. Approach to medical terminology.

   A. By learning the root words, the suffixes and prefixes, thousands of words may be built.

   B. There are exceptions to the system.

   C. When you write a new word, pronounce it out loud and listen to it. This should help you identify the exceptions.

   D. Stay alert for the parts of words you know for they will give meaning to new words.

SAMPLES

Pronounce word. Student to spell, give meaning of prefix and/or root word, and define.

bradycardia

atresia

amblyopia

exacerbation

ectopic

myositis

cholelith

myelitis

metritis

prognosis

dacryostenosis

fibromyoma

Give the medical terminology for the following:

scanty amount of urine

failure of the kidneys to secrete urine

painful or difficult breathing

gallstone

a woman who has never borne a child

loss of appetite

Give name of the operation for the following:

plastic repair of ovary

removal of gallbladder

repair of hernia

surgical fixation of a wandering spleen

suture of an artery

Give meaning of the following prefix, root word, or suffix:

intra-

inter-

enter-

peri-

pyo-

-lith

LIST OF ABBREVIATIONS

Abbreviations	Meaning
$\overline{AA}$, $\overline{aa}$	of each
a.c.	before meals
ACTH	adrenocorticotrophic hormone
A.D.	right ear (auris dextra)
add.	let there be added
ad lib.	at pleasure; at discretion
A.F.	acid-fast
A/G ratio	albumin-globulin ration
A.H.A.	American Hospital Association
A.J.	ankle jerk
Alb.	albumin
Alt. dieb.	every other day (alternis diebus)
Alt. hor.	every other hour (alternis hour)
Alt. noct.	every other night (alternis noctibus)
A.M.	before noon (ante meridiem)
Anes.	anesthesia
Ante	before (ante)
$A_2 > P_2$	Aortic 2nd heart sound greater than pulmonic 2nd sound
$A_2 < P_2$	Aortic 2nd heart sound less than pulmonic 2nd sound
aq.	water
aq. dist.	distilled water
a.s.	left ear (auris sinistra)
A.T.S.	antitetanic serum
A.V.	auriculoventricular
A.Z. Test	Aschheim Zondek test
Bact.	bacterium
Ba. enem.	barium enema
Bib.	drink
b.i.d.	twice a day (bis in die)
B.M.	bowel movement
B.M.R.	basal metabolic rate
B.P.	blood pressure
B.P.H.	benign prostatic hypertrophy
b.s.	breath sounds
$\bar{c}$	with
Ca	carcinoma
c.b.c.	complete blood count
cc	cubic centimeters
C.C.	chief complaint
cf.	compare

C.I.	color index
cm.	centimeter
C.M.	tomorrow morning (cras mane)
C.N.	tomorrow night (cras nocte)
C.N.S.	central nervous system
C.P.C.	clinical pathological conference
C.S.F.	cerebrospinal fluid
C.V.	tomorrow night (cras vespere)
C.V.A.	Cerebrovascular accident or Costo-vertebral angle
D & C	dilation and curettage
decub.	lying down (decubitus)
De d. in d.	from day to day (de die in diem)
Dieb. alt.	on alternate days (diebus alternis)
Dieb. tert.	every third day (diebus tertiis)
D.O.A.	dead on arrival
dr.	dram
Dx	diagnosis
ECG or EKG	electrocardiogram
E.D.C.	estimated date of confinement
EEG	electroencephalogram
E.E.N.T.	eye, ear, nose, and throat
E.N.T.	ear, nose, and throat
E.O.M.	extraocular movements
E.S.R.	erythrocyte sedimentation rate
F.H.	family history
F.H.S.	fetal heart sounds
Fl., fld.	fluid
G.B.	gallbladder
GC	gonorrhea
G.E.	gastroenterology
G.I.	gastrointestinal
gm.	gram
G.P.	general practitioner
gr.	grain
gt., gtt.	drop; drops
G.U.	genitourinary
Gyn	gynecology
h.	hour
Hb., Hbg.	hemoglobin
H.d., h.s.	at bedtime
H.C.V.D.	hypertensive cardiovascular disease
/HPF	per high power field
H.V.D.	hypertensive vascular disease
I.M.	intramuscular
In d.	daily

Int. Med.	Internal Medicine
I.Q.	intelligence quotient
I.S.	intercostal space
I.V.	intravenous
I.V.P.	intravenous pyelogram
k.j.	knee jerk
k.k.	knee kick
K.U.B.	kidney, ureter, and bladder
L.	liter
L_1; L_2	1st lumbar vertebra; 2nd lumbar vertebra
L.B.D.	left border of dullness (of heart to percussion)
L.C.M.	left costal margin
L.L.Q.	left lower quadrant
L.M.D.	local medical doctor
L.M.P.	last menstrual period
L.O.A.	left occipito-anterior
L.S.K.	liver, spleen, and kidneys
L. & W.	living and well
McB. pt.	McBurney's point
MCH	mean corpuscular hemoglobin
MCHC	mean corpuscular hemoglobin concentration
MCV	mean corpuscular volume
mg.	milligram
M.I.	mitral insufficiency
mm.	millimeter
M.S.	mitral stenosis
N.P.N.	nonprotein nitrogen
O.B.; Ob.; Obs.	obstetrics
O.D.	right eye (oculus dexter)
O.S.	left eye (oculus sinister)
℥	ounce
P. & A.	percussion and auscultation
Para I	A woman having borne one child
PA	pernicious anemia
pc.	after meals
P.E.; Px	physical examination
P.H.	past history
Phys. Med.	physical medicine
P.I.	present illness
P.I.D.	pelvic inflammatory disease
P.M.I.	point of maximal impulse (of heart on chest wall)
P.M.N.	polymorphonuclear neutrophilic leukocytes
p.r.n.	whenever necessary
prog.	prognosis
P.S.P.	phenolsulfonphthalein test (kidney)
Psy.	psychiatry
Psych.	psychology

Pt.	patient
P.T.	physical therapy
quotid	daily
q.	every
q.d.	every day (quaque die)
q.h.	every hour (Quaque hora)
q.i.d.	four times a day (quater in die)
q. 2h	every 2 hours
q.n.	every night (quaque nocte)
q.s.	sufficient quantity
q.n.s.	quantity not sufficient
R.B.C.	red blood cells
R.L.Q.	right lower quadrant
R.R.&E.	round, regular, and equal (of pupils)
s̄	without
s̄s̄	one half
sig.	let it be labeled
Sp.gr.	specific gravity
S.R.	sedimentation rate (C.S.R.-corrected sedimentation rate)
SS;ss	one half
Tss	one and one half
Stat.	at once
Stet.	let it stand
T.P.R.	temperature, pulse, respiration
T.A.T.	tetanus antitoxin
T.B.; t.b.; Tbc	tuberculosis; tubercle bacilli
T.F.	tactile fremitus
T.I.D.; t.i.d.	three times a day (ter in die)
Tr.; tr.	tincture
V.D.	venereal disease
V.D.H.	valvular disease of heart
V.F.	vocal fremitus
WBC	white blood cells (white blood count)

ABBREVIATIONS

Abbreviations	Meaning
A.A.M.R.L.	American Association of Medical Record Librarians
A.M.A.	American Medical Association
A.H.A.	American Hospital Association
F.A.C.S.	Fellow, American College of Surgeons
F.A.C.P.	Fellow, American College of Physicians
F.A.C.H.A.	Fellow, American College of Hospital Administrators
U.S.P.	United States Pharmacopeia
U.S.P.H.S.	United States Public Health Service
$AgNO_3$	silver nitrate
ASA	aspirin (acetylsalicylic acid)
CO_2	carbon dioxide
H_2O	water
HCl	hydrochloric acid
$KMnO_4$	potassium permanganate
K	potassium
KI	potassium iodide
NaCl	sodium chloride (common salt)
N_2O	nitrous oxide
NH_4Cl	ammonium chloride
O_2	oxygen
$(C_2H_5)_2O$	ethyl ether
C_2H_5Cl	ethyl chloride
C_3H_6	cyclopropane

CONTENT OF MEDICAL RECORDS

CONTENT OF MEDICAL RECORDS

I. Topic: Requirement and Content of Each Type of Record in General.

II. Objective: To gain a knowledge of the requirements for each type of record.

III. Activities and Procedures:

- A. Introduction.
- B. Size and color.
- C. Joint Commission on Accreditation of Hospitals.
- D. Combining forms.
- E. Record control.
- F. Assembly of the record.
- G. Record forms.
- H. Responsibility for content of the medical record.
- I. Medical record department's responsibility for record content.

IV. Assignment: None.

V. References and Materials:

A. Transparencies.

1. WORD: "Quantitative Analysis."
2. WORD: "Qualitative Analysis."
3. Cartoon: "Measure Up or Drop Out."
4. Cartoon: "Medical Records Marching in to the Medical Record Department."

B. Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Physician's Record Co., Chicago, 1963, pp. 33-39; 493-494.

C. Sample forms.

MEDICAL RECORD CONTENT

QUANTITATIVE ANALYSIS OF THE MEDICAL RECORD--PART I

OBJECTIVE: To acquire an understanding of the purpose of the Quantitative Analysis.

To gain a knowledge of the requirements for each type of record.

DEFINITIONS: 1. Quantitative Analysis: The analysis that checks for omissions and discrepancies is known as the "quantitative review" or analysis and is initially the responsibility of the medical record personnel. (Transparency #1)

2. Qualitative Analysis: The review that evaluates the record to measure the quality of care it describes is known as the "qualitative review" or analysis, and is the responsibility of the attending physician and the medical staff. (Transparency #2)

3. Statistics: The data gathered routinely from the review of the medical records of discharged and/or deceased patients, which is used to compile reports required for use by the hospital administrator, by the medical staff, and by outside agencies, either official or voluntary. May include total counts of patients and separate counts of various kinds of patients, such as patients who enter the hospital and occupy a bed (inpatient admissions), and patients who are released from a bed and for whom there is a hospital record (inpatient discharges). Counts that, combined with others, are used to determine length of stay and occupancy, or infection and death rates and, therefore, form the basis for describing the operation of the hospital and evaluating care rendered to the patients.

PURPOSE: The purpose of the quantitative analysis is to check for omission and discrepancies within the medical record and to draw these to the attention of the attending physician by means of the "This Record Lacks" checklist or refer the matter to the Medical Record Committee.

REQUIREMENTS AND CONTENT OF EACH TYPE OF RECORD IN GENERAL

I. INTRODUCTION: Standardization leads to efficiency; however, there will be variation of medical record forms and the arrangement of these forms in each hospital. The medical records reflect the different purposes and accomplishments of the different types of hospitals--small, large, research, etc. However, a sensible effort should be made towards standardization.

A habit should be formed to refer to the medical record as a "medical record" and delete the use of the term "chart." A chart is a sheet giving information in tabular form; also a graph. There are charts in a medical record--such as, the graph recording the patient's vital signs; temperature, pulse, and respiration.

The medical record is made up of many records contributed by physicians, nurses, technicians, therapists, and admitting officers. Personnel in the medical record department do not contribute to the medical record.

As a whole, however, those in the medical record department have a better and more inclusive knowledge and understanding of the record. This knowledge is gleaned as a result of:

1. being responsible for the arrangement of the pages.
2. insuring accuracy and completeness of the information recorded.
3. checking on consistency and agreement between the various sections of the medical record.

II. SIZE AND COLOR: (Transparency #3)

A. Strive to maintain the same size for all forms, preferably 8½ x 11. The small individual laboratory reports are often small in size but should be mounted on the standard sized sheet.

B. Color coding the forms or colored borders on forms is considered good medical record practice. If colored forms are used it is interesting to obtain the same color second sheets for typing reports such as histories, physicals, consultations, operative reports, discharge summaries. Physicians become familiar with the color of the forms in the medical record. When the physician's carbon copy is filed in his office record, it makes it easy for him to identify the report as it relates to the hospital medical record.

III. JOINT COMMISSION ON ACCREDITATION OF HOSPITALS:

"The Joint Commission on Accreditation of Hospitals recommends no specific medical record forms. Records are evaluated on the basis of content and whatever forms the hospital finds most useful are acceptable."

Guide: The medical record should provide "sufficient recorded information to justify the diagnosis and warrant the treatment and the end results."

Evaluating Forms: Refer to the MANUAL FOR MEDICAL RECORD LIBRARIANS by Edna K. Huffman, R.R.L. as it has been written primarily with the needs of the smaller, nonspecialized and non-teaching hospitals in mind.

Record Forms Committee: This is usually a subcommittee of the Medical Record Committee. The purpose of the committee is to revise or discard obsolete forms; establish file of sample approved forms; consult interested departments before revisions are considered.

All departments concerned should be notified of any changes that have received final approval. The departments should be consulted prior to reordering any form so that they may make any suggestions for change on the form.

The suggested members of the committee would be the purchasing agent, a representative from administration (or the administrator), budget control officer, and the medical record librarian, along with a member of the medical staff.

A checklist to help evaluate each form would be helpful.

Should there be no Forms Committee, the medical record librarian should be able to give advice and practical suggestions whenever new forms are under consideration.

It is often practical to have a "trial run" when adopting a new form. A small quantity of a mimeographed or otherwise economically prepared forms will allow for further revisions to be made after the form has been in use for a period of time.

IV. COMBINING FORMS:

In certain situations, there may be a combination of the physician's orders and the progress record; space on the graphic sheet for many of the notes ordinarily written by the nurse in the bedside record, and combination history and physical sheet. It has also been known that the physician's notes, progress, and orders be integrated with the nursing notes and the notes of the paramedical specialties.

V. RECORD CONTROL:

A medical record should be received in the medical record department for each person discharged from the hospital. All of these records should be received the day following discharge. A daily listing of patients who were discharged or died during a given 24-hour period is prepared. (Transparency #4)

VI. ASSEMBLY OF THE RECORD:

There are no rigid rules but a standard arrangement should be agreed upon. With chronological record, all information is recorded consecutively by date. With this method the present status of the patient is immediately apparent through reference to the most recent entries. One exception occurs when there has been more than one operation. It is far more useful to arrange the sheets in "blocks" than to put all the anesthesia reports together and all the operative reports together. It is more logical to place the anesthesia report, the surgical report, recovery room report, and then follow them with the pathology report (tissue).

Therefore, the following order is suggested: sociological, medical, and nurses reports.

VII. RECORD FORMS:

The MANUAL FOR MEDICAL RECORD LIBRARIANS contains some practical advice about the quality of record forms.

VIII. RESPONSIBILITY FOR CONTENT OF THE MEDICAL RECORD:

The content falls into three major divisions:

A. Identifying information and related sociological data.

B. Medical information.

C. Nurses' section of the record.

Sociological Data: Most of the recorded sociological data will be contained in the complete identification of the patient, secured on admission by those in the admitting office.

Medical Section: The primary source for these reports will be from the attending physician. He is to sign all entries he makes in the medical record. Any transcription must be signed by the physician dictating the report. If another physician sees the patient in consultation, the consultant is responsible for documenting this report.

The heads of other departments are responsible for all notes recorded by persons in their departments.

The nurses who care for the patient are responsible for recording their observations and making careful notes of the treatment and care they, or others working under their supervision, have given the patient.

The above individuals generally do their work well and conscientiously; however, the medical record personnel are given the responsibility for checking these notes in a systematic way and calling omissions, confusing statements, or substandard charting to the attention of the persons responsible. Most of the time these people need only a periodic reminder.

IX. MEDICAL RECORD DEPARTMENT RESPONSIBILITY FOR RECORD CONTENT:

One of the most important functions of the medical record department is the "inspection" and "quantitative evaluation" of the records concerning patients' hospitalizations and illnesses.

The personnel in medical records must be able to recognize omissions, errors, and failures to follow the rules and regulations adopted by the hospital and its medical staff. Therefore, knowledge of what goes into a complete medical record and the forms used will help them carry out this function intelligently.

The following basic requirements of the medical record content must be met:

A. All patients are adequately identified and each page of the record bears identification data.

B. All indicated reports are included in the record.

C. All reports are properly signed.

D. The internal content of each record actually belongs to that particular record.

quantitative

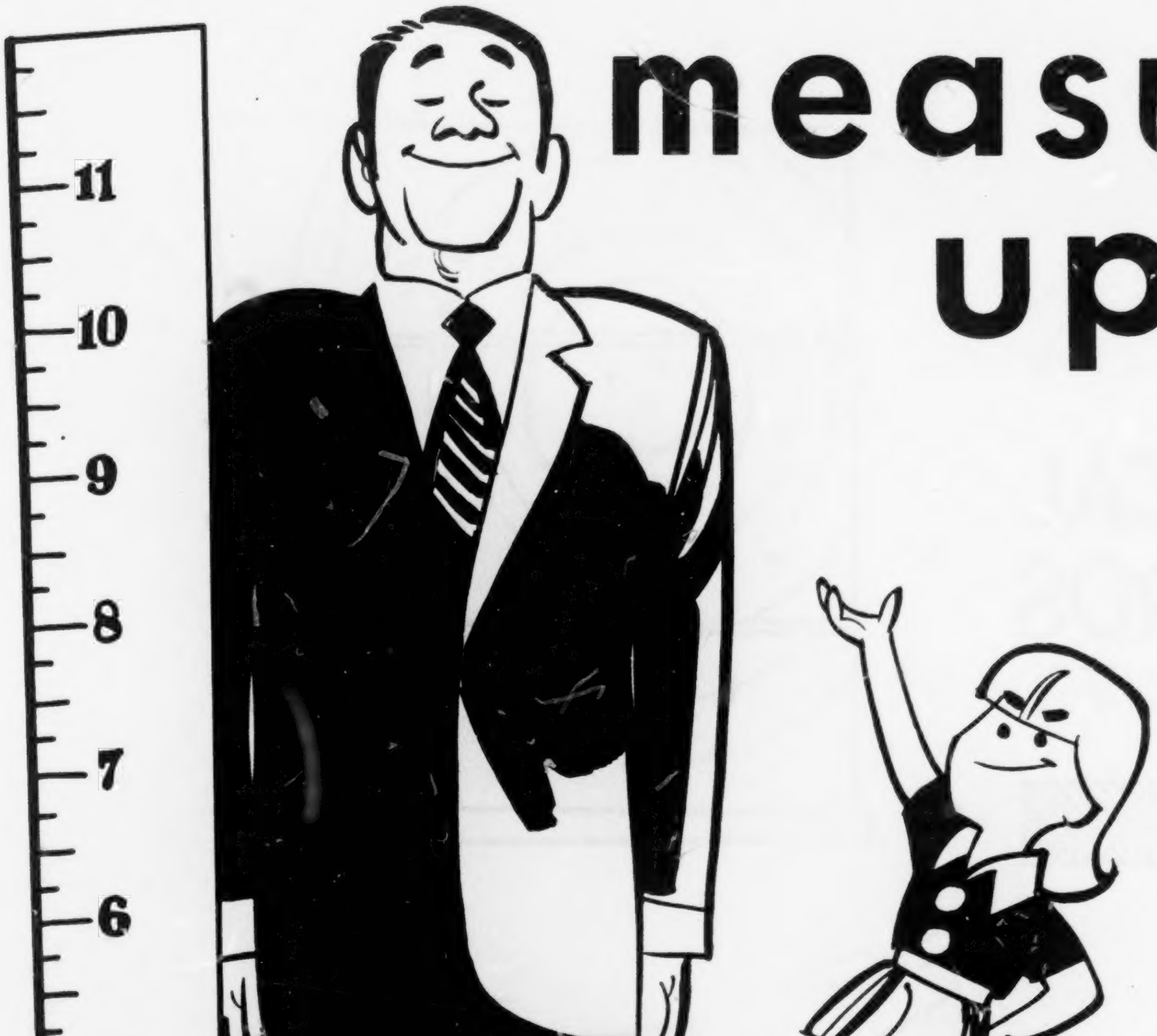
analysis

by

M.R.L.

qualitative
analysis
by an
M. D.

measure up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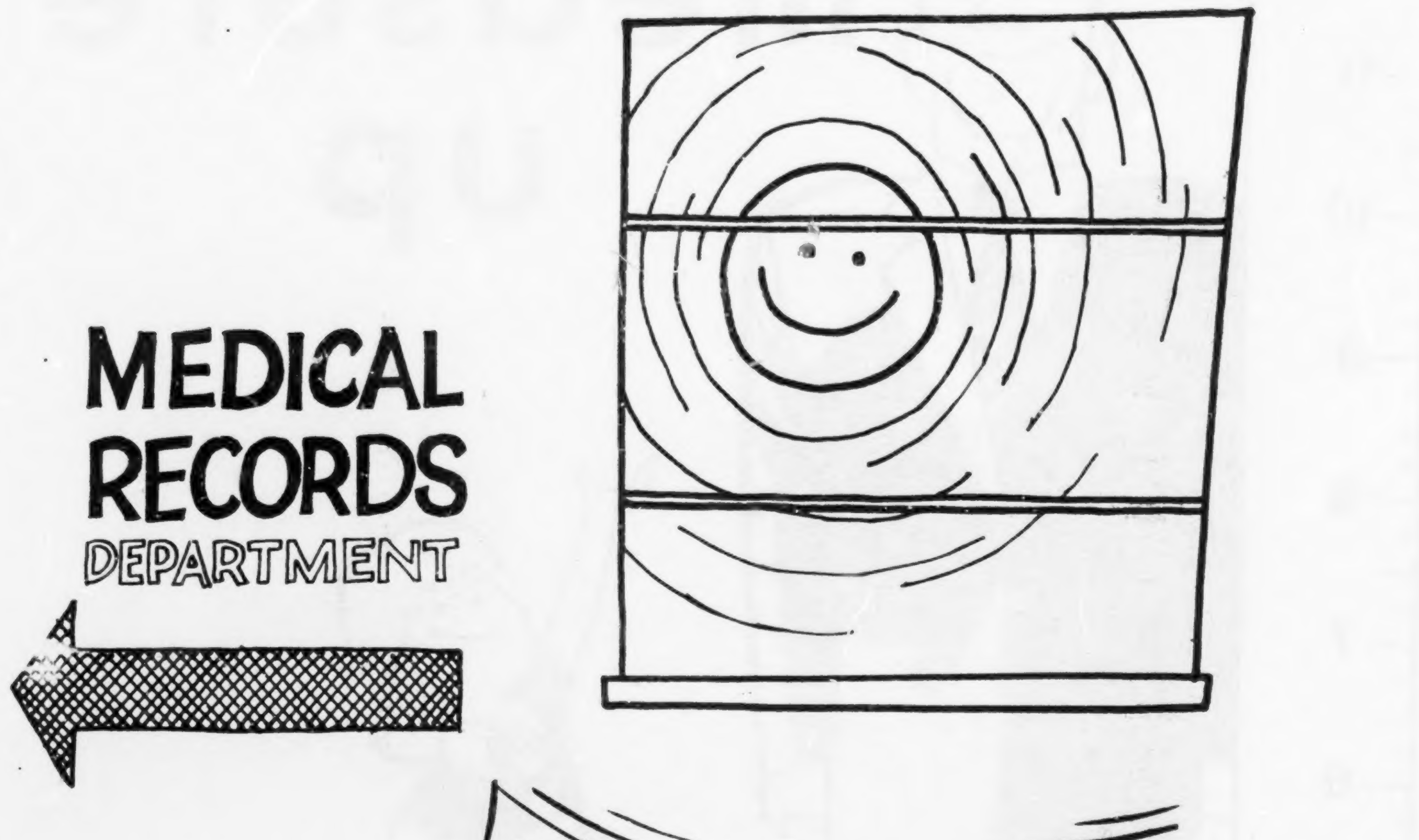

MEDICAL
RECORDS
DEPARTMENT

CONTENT OF THE MEDICAL RECORD

I. Topic: Content for Each Type of Record.

II. Objectives: To acquire an understanding of the purpose of quantitative analysis.

To gain a knowledge of the requirements for each type of record (JCAH and individual hospitals).

Purpose of the quantitative analysis is to check for omission and discrepancies within the medical record and to draw these to the attention of the attending physician by means of the "THIS RECORD LACKS" checklist or refer the matter to the Medical Record Committee.

III. Activities and Procedures: Lecture.

A. Summary Sheet.

B. Consents.

C. Autopsy Findings.

D. History and Physical Examinations.

E. Consultations.

F. Laboratory Reports.

G. X-ray Reports.

H. Special Reports.

I. Anesthesia Reports.

J. Report of Operation.

K. Progress Notes and Summary.

L. Physicians' Orders.

M. Nurses' Notes.

N. Memoranda Slips.

O. Routing and Control Systems.

IV. Assignment: Read References and Work Problems.

V. References:

Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Ch. V., "Assisting the Physician," pp. 191-203; Ch. II, "The Medical Record," pp. 33-126; Ch. XIV, Section on Correction of Original Data, p. 446; Ch. XIV, Section on Consents, pp. 446-449; "Record Forms," pp. 493-494, Physician's Record Co., Berwyn, 1963.

Hospital Accreditation References, 1964 Ed., American Hospital Association, Chicago, 1964. (Section on Medical Record Department, pp. 101-118)

Bulletin #10, Standards for Hospital Accreditation, Joint Commission on Accreditation of Hospitals, Chicago, 1964.

Bulletin #17, Standards for Hospital Accreditation, Joint Commission on Accreditation of Hospitals, Chicago, 1964.

American Hospital Association, Medical Record Forms for Hospitals: Guide to Preparation, American Hospital Association, Chicago, 1963.

American Hospital Association, Guide to the Organization of a Hospital Medical Record Department, American Hospital Association, Chicago, 1962.

American Medical Association, The Wonderful Human Machine, American Medical Association, Chicago, 1967.

VI. Materials:

A. Transparencies.

1. Routing List.
2. Cartoon: "Signatures."
3. Outline: "Dictating Histories and Physicals."
4. Operative Report
5. Cartoon: "Typing Confidential Reports."
6. "This Record Lacks" Slip.
7. Routing List.

B. Fictitious Medical Record Case.

C. Problems.

CONTENT OF THE MEDICAL RECORD

I. INTRODUCTION.

Finding omissions and discrepancies, obtaining corrections, and eliminating the cause whenever possible, are the responsibilities of the medical record librarian. By insuring completeness and accuracy of the reports in the medical record (a quantitative review), one provides an authentic "source document."

By setting up a routine quantitative analysis of all records, carefully and thoughtfully done by medical record personnel, better medical records will almost certainly be established. CAUTION: Be careful that the steps you take to improve the quality of the record are not interpreted as judgments about the quality of care reflected in the record. This falls in the area of a qualitative analysis, which is the responsibility of the doctors. They may request your help in initiating the qualitative review but it is their problem and responsibility.

The quantitative analysis of the records is a review that is to be carried out on all records of patients discharged the previous day. This is the first major duty of the medical record department personnel. By keeping the QA current, any error, discrepancy, or omission can be corrected while the patient and his hospital stay are still in the minds of those responsible for his care.

II. PROCEDURES.

A. Secure all Medical Records of the Patients Discharged the Previous Day.

Set up a policy or a regulation as a written directive circulated to all departments concerned requiring that all records be delivered to the Medical Record Department by 7:30 a.m. of the day following discharge. Be sure that this is agreed upon by the Nursing and Medical staff. It could be suggested that a member of the nursing staff, who is going off duty, be asked to take the records to the medical record department each morning. In some instances it may be that there is a messenger service, or it could be the duty of the ward secretary. In any event, insist on prompt delivery.

If you are provided a list of the admissions and discharges of the previous day by the business office, you can use this as a control listing to make sure that you are receiving all of your records. If you do not receive such a list, set up your own listing. This should be arranged alphabetically or numerically according to the patient's hospital number. Check off on this list the name of the patient whose record has been received and take immediate steps to obtain the others.

B. Arrange the Medical Record in Order.

Place the sheets of each record in order for permanent filing. In some situations this will have been done by the nurses or ward secretaries. At this point fasten the record together so that it will remain neat, in order, and all together. Do not use a paper clip for this purpose as the record must go through various processes before reaching the permanent file. The paper clip often drops off or picks up other papers. This could lead to a lost record.

C. Inspect the Record and Note "Deficiencies."

This is the major part of the whole routine. There are four (4) routine responsibilities involved in checking the medical record. Two of these checks are for COMPLETENESS. Make sure that all required reports are in the record and that they all bear the proper signatures.

Two checks are for ACCURACY. Make sure that the patient's name is spelled correctly and that the correct hospital number is on each page of the record. At the outset, double check the spelling of the patient's name with his or her written signature. Here, it is felt that it is important to draw to the attention of the Nursing Service Director a gross negligence in identifying these records while the patient is in the hospital. It should not be the responsibility of the medical record librarian to append a name and hospital number on an unidentified report that is "presumed" to belong with the rest of the sheets in the record.

You must watch for reports of other patients that may have been placed on the other patients' medical records. Doctors sometimes pick up the wrong record to write a progress note. Watch for discrepancies. A notation that there was a complaint of radiating pain down the left arm on the record of a postsurgical patient might cause difficulty later. Question a notation by another physician on the record by tactfully asking a question, such as, "Was Doctor X a consultant on the case?" or "Was Doctor X covering for you while you were away?" It is up to us to find such errors if they have slipped through as far as the medical record department.

In connection with the check for accuracy, also look for such inconsistencies as "right foot" on one report and "left foot" on another. When the pathology report indicates that the appendix was removed but the operative report and/or the face sheet bear no note of this, it is important that this difference be noted and promptly called to the attending physician's attention.

D. Availability of the Medical Record.

This is also another responsibility that should be routine in the medical record department. Make sure that they are available at all times while they are being completed, reviewed, and indexed. (Transparency #1) All medical records should be kept in the department and not taken to the doctors' offices or to their homes. It also means that they should not be in unmarked drawers or placed in "Do Not Disturb" piles on top of the files. Until they reach their numerical place in the permanent file, a simple efficient control method must be employed to indicate where each record may be found. The list of discharges for the previous day or a copy may be used for a "routing list." This should indicate where the medical record is until it is ready to be placed in the permanent file.

Having to rummage through stacks of records that follows a request for the record of a recently discharged patient is a classic symptom of inefficiency in a medical record department.

Refer to Bulletin #10 of the Joint Commission on Accreditation of Hospitals as you review each record for completeness, accuracy, and correlation. Also, refer to the rules and regulations about medical records which have been adopted in your hospital.

The reading assignment will give a detailed guide to quantitative review of a medical record. When you note deficiencies of any kind, remember you are not one of the contributors to the medical record. The amount of writing you do on the record is minimal. You may occasionally correct a misspelled name or correct a transposed hospital number. When coding the diseases and operations, you may write these code numbers on the front sheet; otherwise, you will be wise not to write on the record.

A doctor who has not expressed his diagnosis according to Standard Nomenclature, or who has omitted the final recording of certain obviously existing conditions or operations plainly documented elsewhere in the record, must make the corrections and changes himself. This is true, too, of the notes recorded by technicians, nurses, admitting officers, and others writing in the record.

True, the actual recording of many parts of the record have been done perhaps (through typewritten transcription of dictated material) by you or someone else in the medical record department. If this responsibility is yours, it will be helpful for you to read the chapter in the Manual for Medical Record Librarians, "Assisting the Physician."

III. QUANTITATIVE ANALYSIS.

A. Signatures.

Signatures on the medical record are important and often a problem. The requirements of the JCAH in this regard are clearly stated in Hospital Accreditation References. We will review these JCAH references later. (Transparency #2)

It is a principle that no one can deny or question that each individual should sign what he himself writes or dictates. The requirement that the attending physician shall sign the history, physical examination and summary is not well accepted by some physicians.

"A single signature of the physician on the front sheet of the medical record does not suffice to authenticate the entire content of the record."

Some medical records have a statement on the front sheet that reads: "I have examined and approved this complete medical record on (date) ," or, "I have approved the contents of this record." The physician is responsible for reviewing the completed record before he allows it to be filed, but the value and the wisdom of his signature to a statement like the above is doubtful.

The former Director of the Joint Commission has pointed out that "the summary sheet or face sheet should be signed, and that means the doctor agrees with what is written on the face sheet. Our lawyers tell us that when a statement is made on the bottom of the face sheet that the physician has taken cognizance of the complete record, that he is doing exactly what it says. He has approved the complete medical record as submitted. This includes such things as any financial accounting in the chart, the clothes book, and any other extraneous things that appear on the chart. He should not sign such a statement because he does not know everything about some of the contents of the chart."

B. Summary or Front Sheet.

As above, I repeat that it is unwise that the attending physician's signature on this sheet should indicate his approval of the record as a whole. His signature attests to approval of the final diagnosis and other data recorded by him on this sheet.

A position on this sheet should allow for the provisional or admitting diagnosis. This helps the hospital staff to do a better job of caring for the patient while he is in the hospital. Therefore, it has served its purpose once the patient has gone home. You do have a responsibility for pointing out this omission to him and, if it occurs often, the medical record librarian should notify the Medical Record Committee that this standard of the JCAH and the hospital is not being met.

There is much variation regarding the recording of the result of hospitalization (recovered, improved, not improved, not treated, diagnosed only, dead, etc.). This decision is so subjective and the eventual result so uncertain at the time of discharge that it has little scientific meaning. Keeping this as a statistic has rarely served any purpose. The PAS reports record the following information: Discharge Status--with approval, against advice; Transferred to: other hospital, extended care facility; Died--autopsy, no autopsy; Died in OR postoperative; Coroner's case.

A comment in the discharge summary concerning the patient's reaction to treatment, his condition on discharge, and the prognosis, will prove of more value than a routine checking of "result."

IV. CONSENTS.

A general consent for medical and/or surgical treatment on admission of the patient should be obtained. This is most often found on the back of the face sheet. This authorization must be signed by the patient, or by the nearest relative in the case of a minor or when patient is physically or mentally incompetent.

If surgery is to be performed, a written authorization should always be obtained from the patient. To be legally valid, such a consent or authorization must be an informed consent. The patient or proper relative must indicate in writing that he has been told of what is to be done and the risks involved, if any, regardless of how minimal.

An informed consent which provides protection for the hospital, the surgeon, and the anesthetist is especially important in these days of increasing malpractice claims. The JCAH recommends that hospitals incorporate the following information in their operative consents: statement of the nature of the operation or procedure to be performed; authorization for administration of anesthesia, if necessary; authorization to perform such additional operations or procedures as are considered necessary or desirable in the judgment of the surgeon or physician; consent to dispose of tissues or parts removed at operation; and statement that the signer is aware of the contents of the form he signs.

The consent form should also show the date and time when it was signed so that the hospital would be fully absolved from any claim that the document was signed after the patient was under sedation.

V. HISTORY.

Review the history for the essential sections (chief complaint, present illness, past history, family history, inventory of systems. These should be recorded. All pertinent positive and negative findings should be recorded.

Readmissions: If a patient is readmitted within a month's time for the same condition, the previous history and physical examination with an interval note will suffice.

A. Physical Examination. The report of the physical examination is the result of a thorough examination of the patient by the physician. The terms "negative" and "normal" are opinions, not facts, and should not be accepted unless used when summing up stated facts.

Each hospital should adopt a standard outline to be used for the physical exam. (Transparency #3) A complete physical examination should cover the following: General Appearance, Head, EENT, Chest, Heart and Lungs, Abdomen, Genitalia, (Genito-urinary), Rectal, Extremities, Neurological, the Blood Pressure. Upon completion of the physical an initial impression is made. This is a tentative of provisional diagnosis made by the physician. This reflects his impression of the patient's condition before any of the tests have been completed and a final diagnosis has been reached.

B. Autopsy Findings. When an autopsy is performed a complete protocol of the findings, both macroscopic and microscopic, should be made a part of the medical record. This should be current.

C. Consultations. Consultations imply an examination of the patient and the patient's record. The consultation note should be recorded and signed by the consultant. His findings and a diagnosis should appear on this report, as well as his recommendations.

D. Laboratory Reports. One should always compare the physician's order sheet with the laboratory reports in order to see that a report has been filed for each examination ordered. Such checks lead to a better final record, as reports get mislaid at times or are delayed until after the patient's discharge.

The original signed laboratory report should be entered in the patient's record.

Reports from laboratories outside the hospital are acceptable in lieu of tests performed in the hospital if the following safeguards are maintained:

1. Work is done in a laboratory approved by the city or state or under the direction of a pathologist. Laboratory work performed in a physician's office by a technician, nurse, or office assistant is not acceptable. Since the hospital is held responsible for the quality of laboratory work reported in the medical record, it must limit outside laboratory work to approved laboratories.

2. The test is recent enough to be pertinent to the individual case. (A serological test for syphilis or an Rh determination done any time during the prenatal period would be acceptable. A urinalysis done prior to 48 hours before admission would not be acceptable.)

3. The signed original laboratory report is made part of the medical record.

Routine examinations required on all admissions should be determined by the medical staff. These must include at least a urinalysis and a hemoglobin or hematocrit.

E. X-ray Reports. The original signed radiological report should be entered in the patient's record. If the report does not have provisions for "clinical information or clinical history," recommend this to forms committee when reordering the form.

F. Special Reports. One or more special reports are needed in the majority of cases. These would be reports such as EEG (electroencephalogram), ECG or EKG (electrocardiogram), Physical Therapy, IPPB (Intermittent Positive Pressure Breathing), Diabetic Record, Blood Pressure, Recovery Room Record, etc.

G. Anesthesia Record. The anesthetic record is on a special form. There should be a postanesthetic follow-up, with findings recorded, by an anesthesiologist or a registered nurse anesthetist made after the surgery is performed. The anesthetist should make a four-hour or a next-day follow-up on every case, stating the blood pressure, whether or not the patient has recovered the swallowing re-reflex, whether cyanosis is present, and the condition of the pulse and the general condition of the patient.

This can be recorded on the progress notes or use the anesthetic record.

H. Operative Report. Operative notes should be written or dictated immediately after surgery and should contain both a description of the findings and a detailed account of the technique used and the tissues removed. (Transparencies #4 and #5) When typing the report (this report or any typewritten dictation) the typist should type the dictator's and the typist's initials at the bottom of the page along with the date the report was dictated and the date it was typed.

No operative report is complete if it contains only an account of the procedure followed. The findings are of even more importance.

A dangerous practice has occasionally been adopted by the physician who feels he is too busy and who tries to be efficient and tries to save time. They prepare one or more "standard" descriptions of operations they perform frequently. Instead of dictating an individual report on each patient, they say, "Type up my standard report for this record." The response of the JCAH to the use of routine procedures is, "Absolutely not!! . . ." (Hospital Accreditation References, p. 156)

I. Pathology Report. All tissues removed in surgery are sent to the laboratory, at least an acknowledgment that the tissue has been received and a gross description should be made part of the record. If a microscopic examination is done, a description of the findings should be made a part of the record. Whether or not a microscopic examination is done should be determined by the medical staff and the pathologist according to the rules and regulations of the hospital.

J. Progress Notes and Summary. Progress notes are important in that they give a chronological picture and analysis of the clinical course of the patient. The frequency with which they are made is determined by the condition of the patient.

Discharge Summary: A copy of the discharge summary (if typed by the personnel in the medical record department) should be provided for the attending physician. In order for him to have the necessary identifying information on his copy, it should contain the name of the patient, hospital number, age, dates of admission and discharge, final diagnoses, operative procedures, and dates performed. The following information should also be included: A) Reason for admission (a brief clinical statement of chief complaint and history of present illness), B) Pertinent findings (laboratory, X-ray, physical findings--negative findings may be as pertinent as positive ones), C) Medical and/or surgical treatment (patient's response, complications, hospital infections, or other complications, consultations, and the like), D) Patient's condition on discharge (ambulation, self care, able to work), E) Instructions given on continuing care (medication by name and dosage, other therapeutic measures, referrals, appointments); whether transferred to another hospital or to an extended care facility.

K. Physician's Orders. All treatment procedures should be documented in the medical record. The physician should write and sign all orders.

If physicians care for a considerable number of cases in any one category and adopt standard house orders for this type of case, the orders should be printed and included in the departmental record. This would be like routine newborn, prepartum, and postpartum orders.

Most hospitals have administrative house orders for diet, temperature recording, and routine care of the patient. These orders should be set up after conferences including the medical, nursing, and administrative staffs. These orders should be copied onto the chart by the nurse or clinical clerk and be signed by the physician at the earliest opportunity. If the medical record librarian sees that a notation, "Routine orders carried out," is on the physician's order sheet, she should see that the routine orders are written out. It is best to draw this to the attention of the Director of Nursing Service.

These orders can be extremely important legally long after their chief use as a means of communication during the patient's hospitalization has ended. Efforts of the medical staff, nursing staff, and medical record staff should be directed to constant watchfulness about dates, signatures, stop-orders on drugs, and discharge orders.

L. Nurses' Notes. The importance and purpose of the nurses' notes and the information recorded in them is brought out in the reading assignment in the MANUAL FOR MEDICAL RECORD LIBRARIANS, pp. 67-73.

While reviewing a record after discharge of the patient, you will be responsible for checking identification information and such items as notes of admission and discharge, signatures, etc.

M. Memoranda Slips. This is the form that the medical record librarian uses to note the missing items in the medical record as she performs a "quantitative analysis." This "memoranda" should not be labeled as a "Deficiency Slip." Physicians often resent the implication that they are deficient.

Another tip is to frequently use the words "please" and "thank you" on the memoranda slip.

A sample "This Record Lacks" slip is attached. (Transparency #6)

N. Routing. Some of the medical records may be complete when they reach the medical record department, but before they are filed the proper entries need to be made in the physicians' index and in the disease and operation indexes.

Hospitals wanting to be accredited by the JCAH try to make sure that their medical records are completed within 15 days after discharge, that they are filed within 30 days, and that the records of all patients discharged more than six months ago are indexed by disease and operation. Each hospital sets its own time limits for medical record completion and filing.

However, completed medical records will be legitimately kept out of the file for perusal by committees of the medical staff. Information for the disease and operation indexes in some hospitals is copied from the completed records onto source cards or data sheets, and the records themselves are filed at once.

O. Control System. A control system must be set up for the medical record that is not in the permanent file. This should indicate where an incomplete or borrowed record may be found. An outcard or marker may be inserted in the place the record will eventually occupy in the file, showing its whereabouts, or a card index to unfiled records may be maintained.

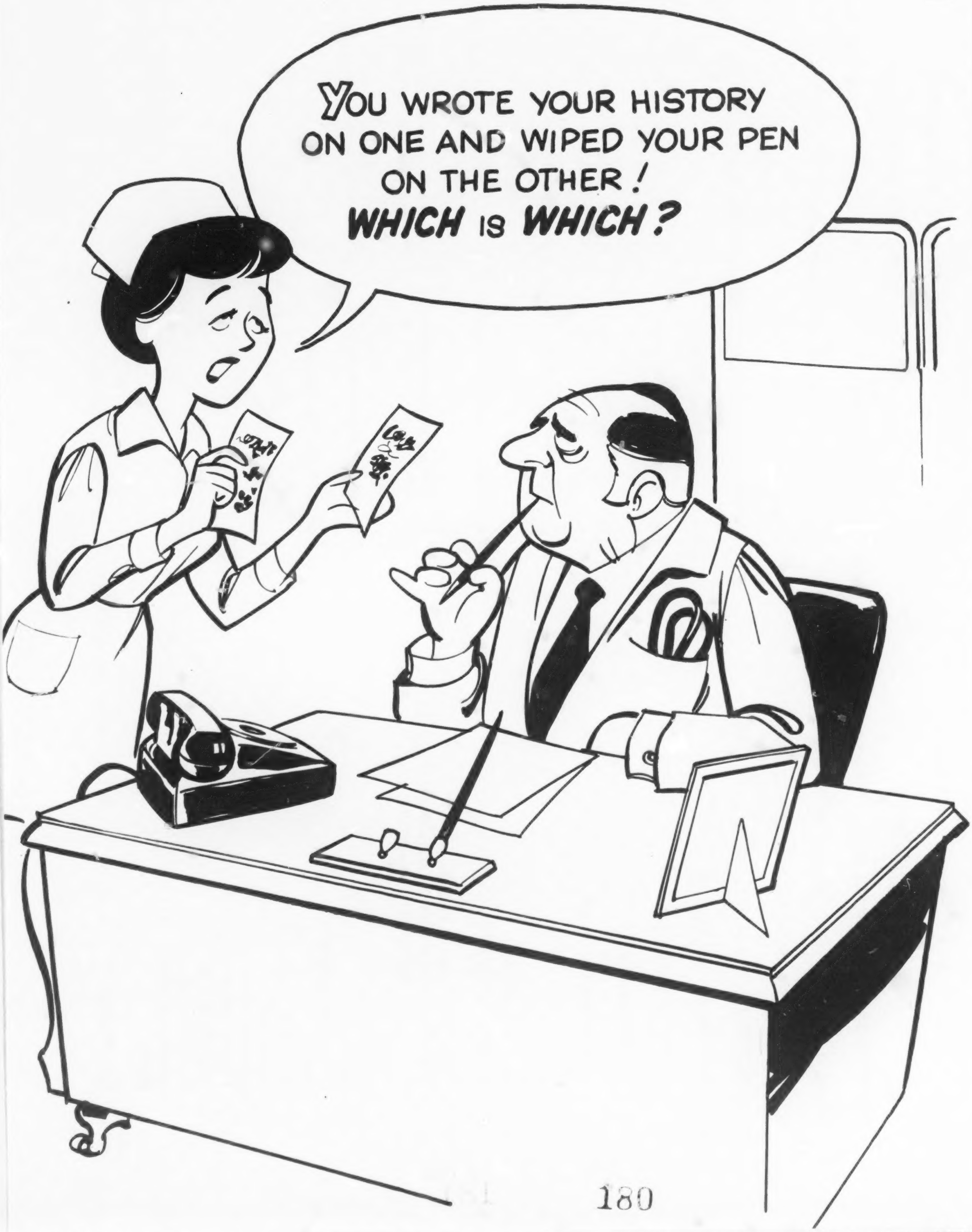
One may also use the daily discharge list for a routing list. (Transparency #7)

Only completed records should be placed in the permanent file.

COMMUNITY HOSPITAL

ANYWHERE, U.S.A.

DISMISSALS	2-1-68 10-3	PHYSICIAN		RM. NO.
698-486	Forrester, Linda	Mullen		504
698-421	Tetzlaff, Lorraine	Case	Good	608
698-424	Tetzlaff, Baby Boy	Todd		Nurs.
698-444	Buxbaum, Bobbie	Hunter		308B
698-411	Royal, Billie Jo	Husband		450
698-488	Huffy, Nancy R.	Scott		Peds
698-543	Huffy, Neal	Scott		Peds
698-432	Loran, Myran	Downs	Inf. Control	503
698-419	Anderson, Michael Todd	Scott		Peds
698-490	Coons, Carol	Woods		607
698-493	Coons, Kenneth	Todd	Pierce	Nurs.
698-494	Coons, Kevin	Todd		Nurs.
EXPIRED:				
698-399	Thompson, Isabell (M) (@ 7:15 a.m.)	Ensign	Audit	455


YOU WROTE YOUR HISTORY ON ONE AND WIPED YOUR PEN ON THE OTHER! **WHICH** IS **WHICH?**

HISTORY & PHYSICAL

DICTATING GUIDE

PATIENT'S NAME **HOSPITAL NO.** **ROOM NO.** **ADM. DATE**

STATE WHETHER OR NOT THIS IS A SURGICAL PATIENT

I. CHIEF COMPLAINT OR C.C. & H.P.I. COMBINED

II. HISTORY OF PRESENT ILLNESS

III. PAST MEDICAL HISTORY

IV. FAMILY HISTORY

V. SYSTEM REVIEW:
  EENT
  CARDIO-RESPIRATORY
  GI
  GU
  GYN
  NEUROLOGICAL
  MUSCULO-SKELETAL

VI. PHYSICAL EXAMINATION:
  GENERAL – Weight, height, admitting temperature,
    admitting blood pressure
  HEAD
  EENT –Fundi
  NECK
  CHEST OR LUNGS
  HEART
  BREASTS
  ABDOMEN
  GENITALIA
  PELVIC EXAM
  RECTAL EXAM
  EXTREMITIES
  NEUROLOGICAL
  SKIN

VII. IMPRESSION:

VIII. DOCTOR DICTATING

DISCHARGE SUMMARY

DICTATING GUIDE

NAME OF PATIENT **SEX** **AGE** **HOSPITAL NUMBER**

DATES OF ADMISSION AND DISCHARGE

FINAL DIAGNOSIS

OPERATIVE PROCEDURE AND DATE PERFORMED

STATE THE FOLLOWING:

A.	Reason for admission	brief clinical statement of chief complaint and history of present illness.
B.	Pertinent findings	laboratory, x-ray, physical; negative findings may be as pertinent as positive ones.
C.	Medical and/or surgical treatment	patient's response, complications (hospital infection or other complication), consultations and the like.
D.	Patient's condition on discharge	ambulating, self-care, able to work, with or without approval.
E.	Instructions given on continuing care	medication by name and dosage, other therapeutic measures, referrals, appointments.
F.	State if patient was transferred to:	Other hospital Extended care facility.

ATTENDING PHYSICIAN

2/12/68
Medical Records Department

ST. CHARLES COMMUNITY HOSPITAL

AKRON, OHIO

OPERATIVE REPORT

Patient's Name SICK, Barry	Room Number 404-1	Case Number 698-486	Date 2-1-68
Surgeon Dr. Time	Assistant Dr. Husband	Scrub Nurse M. Leonard-G. Armstrong	Circulating Nurse J. Paschke, R.N.
Anesthesiologist/CRNA Dr. Davies	Anesthesia Spinal	Operation Began 7:10 [✓ A.M.] P.M.	Closed 9:50 [✓ A.M.] P.M.
Sponge Count Correct	Signed by J. Paschke, R.N.	Drains and Packs	

PREOPERATIVE DIAGNOSIS Acute appendicitis

POSTOPERATIVE DIAGNOSIS Acute suppurative appendicitis

OPERATION: Appendectomy

FINDINGS AND PROCEDURES: Under spinal anesthesia the patient was prepared and draped in a sterile manner.

A right lower quadrant McBurney incision was made and carried through the skin and anterior sheath, transversalis, posterior sheath and peritoneum.

The appendix was located in a retrocecal position. It was noted to be acutely inflamed. The meso-appendix was clamped and ligated with a 000 cotton suture. A purse-string suture of 000 cotton was applied around the base of the appendix; the appendix was excised and the base treated with phenol and alcohol. The base was inverted and the purse-string drawn taut and tied. Further inversion was accomplished with a Z-suture.

The cecum was examined and no Meckel's diverticulum was found. The peritoneum was closed with 000 intestinal. The transversalis, internal oblique and external oblique were closed with interrupted 000 chromic. The skin was closed with subcuticular nylon.

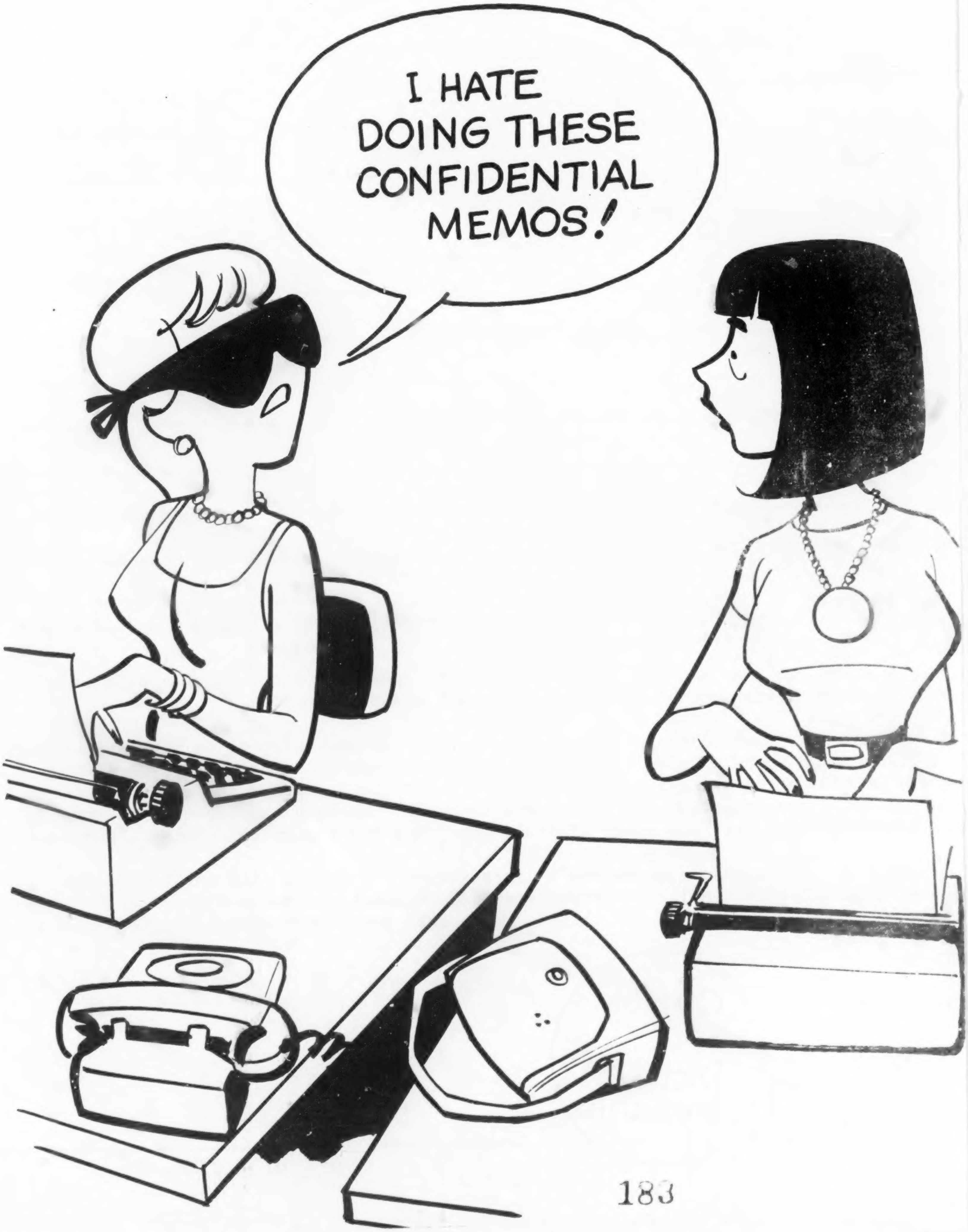
ONT/bk
CC: 2
Dict 2-1-68
Trans 2-2-68

ONT/bk
cc:2
Dict. 2/1/68
Trans:2/1/68

Signature of Surgeon

O. N. TIME, MD

Form 27


I HATE DOING THESE CONFIDENTIAL MEMOS!

Please diagnose according to Standard Nomenclature of Diseases and Operations

PATIENT: ____________________
Hospital Number ____________________

Due Date: ____________________
____

THIS RECORD LACKS:

ADMITTANCE SHEET:
Final Diagnosis: ________
Operation ________
Complication ________
Cause of Death ________
Please Sign ________

HISTORY AND PHYSICAL EXAM:
cc: ________
P.I. ________
ROS ________
F.H. ________
P.H. ________
Please Sign ________
Gen'l Appearance ________
Heart & Lungs ________
Initial Impression ________
Please Sign ________

OBSTETRICAL AND NEWBORN RECORD:
____
____

OPERATIVE REPORT Please Sign ________
PHYSICIANS' ORDERS - Please Sign ________
PROGRESS RECORD:
Admission Note ____________________
Final Summary ________ Please Sign ________
Discharge Summary ________ Please Sign ________

OTHER: ____________________
Was Doctor ____________ a consultant?

MISSING RECORDS: (memo to Medical Record Dept.)

Path ________
X-ray ________
EKG ________
Lab ________
Autopsy ________
____

Thank you!

NURSES:
This chart lacks: ____________________
Discharge order by Doctor ____________________
Time and Date of Discharge ____________________
in Nurses Notes ____________________

1)
2)
3)
4)
5)
6)

CONTENT OF MEDICAL RECORDS

I. Topic: General Review.

II. Objective: To review principal points of medical records.

III. Activities: Lecture and discussion.

  A. Standards.

  B. Medical Record Forms.

  C. Record Content.

IV. Assignments: Review Exercises.

V. Materials and References:

  A. Transparencies.

    1. "Dear Doctor #1"

    2. "Dear Doctor #2"

    3. "Dear Doctor #3"

    4. "Dear Doctor #4"

  B. Set of slides.

  C. Guide for Preparation of Medical Record Forms.

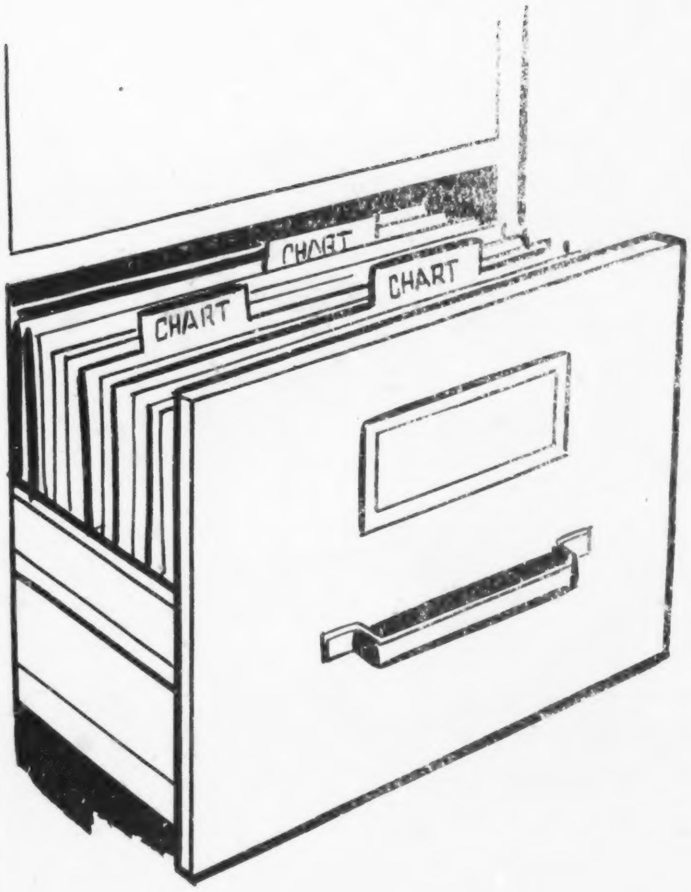
  D. Sample Forms.

  E. Review Exams.

DATE:

DEAR DOCTOR:

I'M IN A DRAWER THAT'S
IN THE FILES
OF MEDICAL RECORDS
AMONG THE PILES
OF UNFILED RECORDS AND
EMPTY LINE.
PLEASE, DOCTOR, COME
COMPLETE AND SIGN.
THANK YOU!



YOU HAVE:

______ RECORDS IN YOUR BOX

______ ARE OVERDUE

______ UNDICTATED OPERATIVE REPORTS

DATE:

DEAR DOCTOR:

IF YOU HELP US-
WE CAN KEEP UP,
BY CRACKY!
THESE INCOMPLETE
RECORDS DRIVE US
WACKY.
HOPE YOU'LL FINISH
YOURS, AND THAT
AIN'T HAY,
SO WE CAN GET THEM
STACKED AWAY.

THANK YOU!

YOU HAVE:

_____ RECORDS IN YOUR BOX

_____ ARE OVERDUE

_____ UNDICTATED OPERATIVE REPORTS

DATE:

DEAR DOCTOR:

WE'RE NOT FISH, AND
WE'RE NOT DEER.
BUT THERE YOU ARE,
WHILE WE ARE HERE.
WE WISH YOU LUCK WITH
ALL YOUR SPORTS,
BUT HOPE YOU'LL STOP
BETWEEN RESORTS.
THANK YOU!

YOU HAVE:

_____ RECORDS IN YOUR BOX

_____ ARE OVERDUE

_____ UNDICTATED OPERATIVE REPORTS

DATE:

DEAR DOCTOR:

CASEY, KILDARE---
WE DON'T CARE.
OUR ONE CONCERN–
WE MUST BE FAIR–
IS THAT YOU COME TO
MAKE ONE CALL
TO FINISH UP YOUR RECORDS–THAT'S ALL.

THANK YOU!

YOU HAVE:

______ RECORDS IN YOUR BOX
______ ARE OVERDUE
______ UNDICTATED OPERATIVE REPORTS

FORMS

The forms in the "Guide to Preparation of Medical Record Forms for Hospitals" are intended as a guide in designing your own forms. Some can be adopted as printed and others modified or ignored.

All items stated or printed on a form should serve a specific purpose. Delete any item that doesn't, and, likewise, the form should provide all information needed for the adequate care of the patient, data for those desirable for research and education and sufficient data to provide legal protection.

(See Ch. 6 in Guide to Organization of Medical Record Department.)

Why do we have medical record forms?

Provide easy, quick recording.
Provide orderly, compact information storage.
Provide easy speedy retrieval.

The content of the record can be evaluated by asking the following questions:

1. Does it contain all the necessary and no unnecessary information?
2. Is the content well and logically organized? Is it clear and unambiguous?
3. Will the form be easy to complete? to retrieve information from? Are format, type used, and spacing the best that can be devised?
4. Will the form save both the recorder and the retriever time?
5. Does the form waste paper? Should it be combined with another existing form?
6. Does the form fit well into our over-all medical record form system?
7. What does the form do? Do we really need such a form, and why?

A. General Medical Records

1. Summary Index--have a running summary of the patient's admission and discharge dates, the final diagnoses, and operative procedures.

2. Admission and Discharge Record--record of sociological data, admitting and final diagnoses, operative procedures, complications, physician's signature.

3. History and Physical--a guide as to the content of these two forms can be printed across the top or in the margin to guide the physician in obtaining and recording information.

4. Nurses' Notes--Vital Signs Record. These can be combined or kept separate. A special blood pressure record may be kept if frequent blood pressures are ordered by the attending physician during the day. An intensive care or coronary care unit will require special forms.

5. Consultation Forms--The mandatory consultations required by the By-Laws of the Medical Staff should be recorded on a special report. This should include the reason for the consultation request, the time of the request and consultation.

   The Pathology and X-ray reports are not considered consultants, however, these two specialists may function as consultants.

6. Departmental Reports--These will be reports, such as, radiology, tissue, physical therapy, etc. These should have sufficient identifying data. The radiology and tissue reports should have space for some clinical history.

   The laboratory forms (urinalysis, blood chemistry, bacteriology, etc.) are generally small in size but may be mounted on an 8½ x 11 report check form for the patient's name, physician, and hospital number.

B. Surgical Records

1. Operative Record--This should include the findings, procedures, pre and postoperative diagnoses.

2. Anesthesia Record--There should be space available for the postanesthetic note.

3. Recovery Room Record.

C. Obstetrical and Newborn Records

It is important that there be:

Prenatal form.
Labor notes.
Obstetrical Anesthesia Record.
Delivery Room Record.
Newborn Record.
Newborn Nursery Record.

Slide Number	Subject of Slide
1 - 11	RRL checking admissions and discharges with daily list
2 - 38	Cardveyor - Master Patient Index
3 - 27	Quantitative Analysis
4 - 37	Discharge Analysis
5 - 36	Statistics
6 - 12	PAS Abstract being checked by Medical Record Librarian
7 - 33	Supervisor checking central recorders in Transcription Pools
8 - 7) 9 - 10)	Transcription Bloopers
10 - 15	Transcriptionists
11 - 6	Clerk Filing Loose Attachments
12 - 5	Checking Record for completeness before filing
13 - 35	Filing in Permanent File (Terminal Digit Filing)
14 - 31	Medical Record Librarian assists physician with the microfilm
15 - 28	Medical Record Librarian assisting the physician
16 - 4) 17 - 3)	Preparing for Medical Record Committee
18 - 1	Forms Control - Medical Record Librarian studying the forms

Slides of Medical Record Department are available from Division of Hospitals and Nursing Homes, Colorado Department of Health, Denver, Colorado.

FICTITIOUS CASE

Medical record composed at St. James Community Hospital, Butte, Montana, by physicians and hospital staff members for class use. (Available from Virginia Lee, Project Director, Division of Hospitals & Nursing Homes, Colorado Department of Health, Denver, Colorado.)

DISCHARGE ANALYSIS

CONTENT OF MEDICAL RECORDS AND QUANTITATIVE ANALYSIS

I. Topic: Daily Analysis of Hospital Service.

II. Objectives:

1. To analyze the various methods of compilation--their advantages and disadvantages.
2. To understand the content and uses of the Daily Analysis.
3. To become familiar with the requirements of the various accrediting agencies.

III. Activities--Lecture.

1. Definition of terms.
2. General considerations.
3. Uses.
4. Methods of Compilation.
5. Content.

IV. Materials: Discharge Sheets and Disease Service Classification Exercise.

V. Assignment: Complete Disease Service Classification Exercise.

DAILY ANALYSIS OF HOSPITAL SERVICE

I. Definition of Terms.

A. Daily analysis of hospital service is a gross appraisal of the efficiency of the hospital and medical staff primarily for the benefit of, and use by, the hospital itself.

B. Service--grouping of records of discharged patients according to their diagnosis. The number of groups varies with the size of the hospital. It is recommended hospitals of 100 beds or less have the following services: Medical, Surgical, Pediatric, Obstetric, and Newborn.

C. Consultation is the written opinion of another physician on a case, requested by the attending physician.

D. Postoperative death is one which is attributable to, or precipitated by, an operation, such as deaths from hemorrhage, shock, embolism, infection, postoperative pneumonia, etc., and occurring within the convalescence period which is usually regarded as being within the first ten days postoperative.

II. General Considerations.

A. Principle of Service Assignment. The assignment of the service in the discharge analysis should be based on the final diagnosis made on discharge of the patient. It is only from the final diagnosis and the results on discharge that a true picture of the work of the hospital can be attained, as the provisional or admitting diagnosis is only tentative and often is changed after work-up and study of the case has been completed.

B. Place of Discharge Analysis in Work Flow. Medical records of patients discharged or died are sent to the Medical Record Department or picked up at the Nurses' Stations within 24 hours: quantitative analysis; discharge analysis; physician's index; to attending physician if record is incomplete; file for medical audit and tissue committee meeting; coding; indexing; permanent file.

III. Uses.

IV. Methods of Compilation.

A. Punch cards.

B. Group analysis. After quantitative analysis has been done, records are ready for posting of statistics. The work sheet is filled out first, then the information is posted in the Discharge and Service Analysis book. The following information is to be posted: date of discharge (month, day, and year); total number of discharges of the day; total male and total female for the day; results; service (enter each case under one service only); religion; special statistics. The totals under the male + female columns should agree with the total number of discharges for the day. The totals under Results, Service, Religion, and Special Statistics also must agree with the total discharges for the day.

C. Individual analysis. This is the same as group analysis except that a work sheet is not used and an entry is made in the Discharge and Service Analysis for each patient discharged per day instead of making one entry for the total discharges per day.

D. IBM.

E. Professional Activities Service (PAS).

V. Content.

A. Social data--information regarding patient's sex, age, religion (race--if this is included in your daily discharge procedure) is obtained from the patient's summary sheet.

B. Minimum Service Maintained.

1. Medicine--includes all diseases and conditions treated by the administration of internal remedies except those which are assigned to a subspecialty.

2. Surgery--includes all diseases and conditions treated by manual or mechanical means except those which are assigned to a subspecialty.

3. Obstetrics--includes all diseases and conditions of pregnancy, labor, and puerperium, whether normal or pathological, pregnancy commencing with conception and puerperium ending, insofar as it concerns the patient admitted for delivery, with discharge from the hospital.

The obstetric service may be further subdivided into the following services:

OB Delivered (20 weeks or over) - includes mothers for whom the pregnancy has terminated in the hospital, regardless of whether the infant was a live birth or a fetal death.

OB Aborted - includes mothers for whom pregnancy has terminated before the 20th week of gestation.

OB Not Delivered - includes pregnant women admitted for a condition of pregnancy but not delivered of a liveborn or stillborn infant in the hospital. Under this heading will come threatened abortions, false labors, deliveries outside the hospital brought in for puerperium, retained placentas, postpartum hemorrhages, ectopic pregnancies, lactating breasts or other puerperal conditions.

4. Newborn (alive at birth)--includes only infants born in the hospital. Infants born on the way to the hospital or at home should be entered under Pediatrics.

5. Pediatrics--includes all diseases and conditions of children under 14 years of age which offer special problems because of their occurrence in this age group except newborn infants born in the hospital.

C. Results--determination of the condition of the patient on discharge is the responsibility of the attending physician. Some summary sheets provide for the following: Recovered, Improved, Not Improved, Not Treated, In for Diagnosis Only, Died Over or Under 48 Hours. The two classifications which cause the greatest confusion are "recovered" and "improved." It must be kept in mind that these terms only refer to the condition of the patient at the time of discharge from the hospital. However, what one physician may consider "recovered," another may choose to call "improved." Matters are greatly simplified by having just the following on the Summary Sheet: Discharged Alive; Died Under 48 Hours; Died Over 48 Hours.

D. Morbidity.

E. Consultations--as noted above consultation is the written opinion of a patient by another physician, requested by the attending physician.

   1. Joint Commission on Accreditation of Hospitals requirements--to be discussed later. (second or third week) JCAH

   2. American Hospital Association requirements--ditto. AMA

CONTENT OF MEDICAL RECORDS AND QUANTITATIVE ANALYSIS

I. Topic: Daily Analysis of Hospital Service.

II. Objectives:

- A. To learn the individual and group methods of compilation--their advantages and disadvantages.
- B. To understand the content and uses of Daily Analysis.

III. Activities: Lecture and Laboratory Session.

- A. General review of first lesson.
- B. Practice session using individual and group compilation.

IV. Materials:

- A. Transparencies.
    - 1. "Outline of Content of Discharge Analysis."
    - 2. "Flow of Charts."
- B. References.
    - 1. Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Physician's Record Co., Berwyn, 1963.
- C. List of Definitions.
- D. Exercise Forms.

DAILY ANALYSIS OF HOSPITAL SERVICE

I. General Review.

A. Definition of Terms.

1. Daily Analysis--Gross appraisal of the efficiency of the hospital and medical staff primarily for the benefit of, and use by, the hospital itself.

2. Service--Grouping of records of discharged patients according to their diagnosis. The number of groups varies with the size of the hospital. It is recommended hospitals of 100 beds or less have the following services: Medical, Surgical, Pediatric, Obstetric, and Newborn.

3. Consultation--Written opinion of another physician on a case, requested by the attending physician.

4. Postoperative Death--One which is attributable to, or precipitated by an operation, such as deaths from hemorrhage, shock, embolism, infection, postoperative pneumonia, etc., and occurring within the convalescence period, which is usually regarded as being within the first ten days postoperative.

5. Census--Number of inpatients occupying hospital beds at any given time. The count usually taken at midnight when there are fewer admissions and discharges. Any specified time is permissible just so it is the same hour each day.

6. Census Days--Numerical accumulation of the days of care rendered to all inpatients by clinical service during the reporting period. A patient day (census day) is the unit of measure denoting lodging facilities provided and services rendered to one inpatient between the census-taking hour of two successive days.

7. Physicians' Index--This index is a record of the work done and the end results obtained by the physicians practicing in the hospital.

B. Principle of Service Assignment.

1. The assignment of the service in the discharge analysis should be based on the final diagnosis made on discharge of the patient. It is only from the final diagnosis and the results on discharge that a true picture of the work of the

hospital can be attained, as the provisional or admitting diagnosis is only tentative and often is changed after workup and study of the case has been completed.

C. Methods of Compilation.

1. Punch Cards.

2. IBM.

3. Professional Activities Service (PAS).

4. Group Analysis.

   a. After quantitative analysis has been done, records are ready for posting of statistics. The work sheet is filled out first, then the information is posted in the Discharge and Service Analysis book. The following information is to be posted: Date of discharge (day, month, and year); total number of discharges of the day; total male and total female for the day; results; service (enter each record under one service only); religion; any other special statistics. Totals under the male and female columns together should agree with the total number of discharges for the day; the totals under Results, Service, Religion, and other statistics kept should also agree with the total discharges for the day.

5. Individual Analysis.

   a. This is the same as group analysis except that a work sheet is not used and an entry is made in the Discharge and Service Analysis for each patient discharged per day instead of making one entry for the total discharges per day.

6. Content.

   a. Social Data. Information regarding patient's sex, age, religion, (race, if this is included in your statistical reports) is obtained from the patient's summary sheet.

   b. Minimum Service Maintained.

      (1). Medicine--Includes all diseases and conditions treated by the administration of internal remedies except those which are assigned to a subspecialty.

(2). Surgery--Includes all diseases and conditions treated by manual or mechanical means except those which are assigned to a subspecialty.

(3). Obstetrics--Includes all diseases and conditions of pregnancy, labor, and puerperium, whether normal or pathological, pregnancy commencing with conception and puerperium ending, insofar as it concerns the patient admitted for delivery, with discharge from the hospital.

(4). Newborn (alive at birth)--Includes only infants born in the hospital. Infants born on the way to the hospital or at home should be entered under Pediatrics.

(5). Pediatrics--Includes all diseases and conditions of children under 14 years of age which offer special problems because of their occurrence in this age group except newborn infants born in the hospital.

c. Results. Determination of the condition of the patient on discharge is the responsibility of the attending physician. Some summary sheets provide for the following: Recovered, Improved, Not Treated, In for Diagnosis Only, Died Over or Under 48 Hours. The two classifications which cause the greatest confusion are "Recovered" and "Improved." It must be kept in mind that these terms only refer to the condition of the patient at the time of discharge from the hospital. However, what one physician may consider "recovered," another may choose to call "improved." Matters are greatly simplified by having just the following on the Summary Sheet: Discharged Alive; Died Under 48 Hours; Died Over 48 Hours.

II. Laboratory Session.

A. Compile census for a six-day period.

B. Post entries on Daily Analysis sheet using individual method.

C. Post entries on Daily Analysis sheet using group method.

Content - Dischg. Analysis

Social Data

- ***Sex***
- ***Religion***
- ***Age***
  - ***Adult***
  - ***Pediatric***
  - ***Newborn***

Service Classification

- ***Medicine***
- ***Surgery***
- ***OB***
  - ***Delivered***
  - ***Not Delivered***
  - ***Aborted***

Content - continued

Newborn

Pediatrics

Results

Recovered
Improved
Not Improved
Not Treated
Diag Only
Died
  over 48 hr
  under 48 hr

or

Died over 48 hr
Dischg Alive
Died under 48 hr

Flow of Charts

Q.A. → *D.A.* → *Physician's Index*

→ *to Attending Phys. for completion* → *Medical Audit &*

Tissue Committee Meeting → *Coding* → *Indexing*

→ *permanent file*

SERVICE ASSIGNMENT FOR QUANTITATIVE ANALYSIS

COMMUNICABLE DISEASE: to include all transmissible disease in the customary acceptance of the term.

DERMATOLOGY: to include all diseases and conditions of the skin.

FRACTURES: to include all cases of fracture without regard to the age of the patient.

GYNECOLOGY: to include all diseases and conditions of the female generative organs and the urinary organs, and the rectum if a part of the disease syndrome of the generative organs. Disease of the breast and diseases and conditions associated with pregnancy and the puerperium are not included.

CANCER: (Malignant disease): to include all malignancies of all sites, including lymphatic and hematopoietic tissues.

MEDICINE: to include all diseases and conditions treated by the administration of internal remedies except those which are assigned to a subspecialty.

NEWBORN: (Alive at birth): to include only infants born in the hospital. Infants born at home or on the way to the hospital should be entered under medicine. An infant is considered a newborn until he is 28 days old.

OBSTETRICS: to include all diseases and conditions of pregnancy, labor, and the puerperium, whether normal or pathological, pregnancy commencing with conception and the puerperium ending, insofar as it concerns the patient admitted for delivery, with discharge from the hospital.

> **DELIVERED:** (20 weeks or over): to include mothers for whom pregnancy has terminated in the hospital, regardless of whether the infant is a live birth or a fetal death (stillbirth).
>
> **ABORTED:** (under 20 weeks): to include mothers from whom the pregnancy has terminated under the time specified by your health agency for a viable infant. If the fetus was aborted before admission to the hospital, no count is kept of the fetus, but if aborted after admission of the mother to the hospital, a count should be kept in the column provided for that purpose.
>
> **NOT DELIVERED:** to include pregnant women for a condition of pregnancy but not delivered of a live born or stillborn infant in the hospital. Under this heading will come threatened abortions which have been prevented from terminating, false labors, deliveries outside the hospital brought in for the puerperium, retained placentas, postpartum hemorrhages, lactating breasts, and other puerperal conditions.

OPHTHALMOLOGY: to include all diseases, injuries, and conditions of the eye and supporting structures regardless of types of therapy, except tumors, venereal diseases, and some communicable diseases.

ORTHOPEDICS: to include all diseases and conditions of the bones, joints, muscles, fascia, tendons, and their nerve control which affect motion and are not acutely traumatic in nature.

OTORHINOLARYNGOLOGY: (also called otolaryngology): to include all diseases of the ear, nose, throat, larynx, pharynx, naso-pharynx, and tracheobronchial tree.

PEDIATRICS: (children): assign this service according to disease or condition; check "child" in the proper bracket on the statistical review sheet.

SURGERY: to include all diseases and conditions treated by manual or mechanical means except those which are assigned to a subspecialty. Breast surgery is counted under surgery.

UROLOGY: to include all diseases and conditions of the male genito-urinary organs and the female urinary organs, unless the latter are a part of the disease syndrome of the female generative organs. (See under Gynecology).

TRAUMATIC SURGERY: to include all cases dealing with a pathological condition brought about by sudden or acute injury. Includes sprain, contusions, lacerations, etc.

DEFINITION OF TERMS--DAILY ANALYSIS OF HOSPITAL SERVICE

1. Daily Analysis--Gross appraisal of the efficiency of the hospital and medical staff primarily for the benefit of, and use by, the hospital itself.

2. Service--Grouping of records of discharged patients according to their diagnosis. The number of groups varies with the size of the hospital. It is recommended that a hospital of 100 beds or less have at least the following services: Medical, Surgical, Pediatric, Obstetric, and Newborn.

3. Consultation--Written opinion of another physician on a case, requested by the attending physician.

4. Postoperative Death--One which is attributable to, or precipitated by an operation, such as deaths from hemorrhage, shock, embolism, infection, postoperative pneumonia, etc., and occurring within the convalescence period, which is usually regarded as being within the first ten days postoperative.

5. Census--Number of inpatients occupying hospital beds at any given time. The count is usually taken at midnight when there are fewer admissions and discharges. Any specified time is permissible, just so it is the same hour each day.

6. Census Days--Numerical accumulation of the days of care rendered to all inpatients by clinical service during the reporting period. A patient day (census day) is the unit of measure denoting lodging facilities provided and services rendered to one inpatient between the census-taking hour of two successive days.

7. Physicians' Index--This index is a record of the work done and the end results obtained by the physicians practicing in the hospital.

DAILY DISCHARGE ANALYSIS WORKSHEET

Date______ Number of Discharges______

SERVICE	No. Of DISCHGS.	CON.	DEATHS	AUTOP.
MEDICAL				
SURGICAL				
OB DEL.				
OB NOT DEL.				
OB OBORTED				
NEWBORN				
PEDIATRIC				
TOTAL				

PATIENT DAYS		TOTAL
MEDICAL		
SURGICAL		
OBSTETRICAL		
NEWBORN		
PEDIATRIC		
TOTAL		

SEX:______

MALE______ FEMALE______

NB MALE NB FEMALE

RESULTS

DISCHARGED ALIVE

DIED UNDER 48 HRS.

DIED OVER 48 HRS.

TOTAL

MEDICARE

DISPOSITION OF CASES UPON DISCHARGE

EXTENDED CARE FACILITY*

NURSING HOME*

HOME HEALTH SERVICES*

OTHER INSTITUTIONS*

HOME

TOTAL

RELIGION

PROTESTANT

CATHOLIC

JEWISH

OTHER

NONE

TOTAL

* If pt. is 65 or over note here:

ECF*

NH*

HHS*

OI*

DAILY DISCHARGE ANALYSIS WORKSHEET

Date________

Number of Discharges________

SERVICE	No. Of DISCHGS.	CON.	DEATHS	AUTOP.
MEDICAL				
SURGICAL				
OB DEL.				
OB NOT DEL.				
OB ABORTED				
NEWBORN				
PEDIATRIC				
TOTAL				

RESULTS

DISCHARGED ALIVE

DIED UNDER 48 HRS.

DIED OVER 48 HRS.

TOTAL

MEDICARE

DISPOSITION OF CASES UPON DISCHARGE

EXTENDED CARE FACILITY*

NURSING HOME*

HOME HEALTH SERVICES*

OTHER INSTITUTIONS*

HOME

TOTAL

PATIENT DAYS	TOTAL
MEDICAL	
SURGICAL	
OBSTETRICAL	
NEWBORN	
PEDIATRIC	
TOTAL	

SEX:

MALE______ FEMALE_________

NB MALE____ NB FEMALE_______

RELIGION

PROTESTANT

CATHOLIC

JEWISH

OTHER

NONE

TOTAL

* If pt. is 65 or over note here:

ECF*

NH*

HHS*

OI*

DAILY ANALYSIS OF HOSPITAL SERVICE									DISPOSITION OF CASE						MEDICINE					
	CASE NUMBER	MEDICARE	MALE	FEMALE	TOTAL NUMBER OF DISCHARGES	PATIENTS DISCHARGED ALIVE	DIED UNDER 48 HOURS	DIED OVER 48 HOURS	ECF	NURSING HOME	HOME HEALTH SERVICE	OTHER INSTITUTIONS	HOME	TOTAL (incl.) DEATHS	NO. PATIENTS ADMITTED	DAYS OF HOSPITAL CARE	INFECTIONS	DEATHS	AUTOPSIES	CONSULTATIONS
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	SURGERY							OB DELIVERED							OB OBORTED							OB NOT DELIVERED						
	NUMBER OF PATIENTS	DAYS OF HOSPITAL CARE	INFECTIONS	DEATHS	AUTOPSIES	CONSULTATIONS		NUMBER OF PATIENTS	DAYS OF HOSPITAL CARE	INFECTIONS	DEATHS	AUTOPSIES	CONSULTATIONS		NUMBER OF PATIENTS	DAYS OF HOSPITAL CARE	INFECTIONS	DEATHS	AUTOPSIES	CONSULTATIONS		NUMBER OF PATIENTS	DAYS OF HOSPITAL CARE	INFECTIONS	DEATHS	AUTOPSIES	CONSULTATIONS	
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	NEWBORN									PEDIATRIC							RELIGION						ADMISSIONS					
	NUMBER OF PATIENTS	DAYS OF HOSPITAL CARE	INFECTIONS	DEATHS	AUTOPSIES	CONSULTATIONS	MALE	FEMALE		NUMBER OF PATIENTS	DAYS OF HOSPITAL CARE	INFECTIONS	DEATHS	AUTOPSIES	CONSULTATION		PROTESTANT	CATHOLIC	JEWISH	OTHER	NONE	TOTAL	MEDICAL	SURGICAL	OBSTETRICAL	NEWBORN	PEDIATRIC	TOTAL
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	ADULT & PEDIATRIC CENSUS				NEWBORN CENSUS				CENSUS BREAKDOWN-ADULT & PED.				
	ADMISSIONS	DISCHARGES	PATIENTS IN HOSPITAL AT MIDNIGHT	IN & OUT	ADMISSIONS	DISCHARGES	PATIENTS IN HOSPITAL AT MIDNIGHT	IN & OUT	MEDICAL	SURGICAL	OBSTETRICAL	PEDIATRIC	TOTAL
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204

DAILY FLOOR CENSUS

For the 24 Hours Ended Midnight

FLOOR 1st SECTION Med-Surg-OB-NB-Ped DATE Oct. 21, 1967

ADMITTED (Record Total on LINE 2 of Summary)				**DISCHARGED** (Record Total on LINE 5 of Summary)			
HOSP. NO.	ROOM NO.	NAME	TIME	HOSP. NO.	ROOM NO.	NAME	TIME
47243	105	Brown, Terry	7^{00} am	47231	109	Blout, Joseph	10^{30} am
47244	107	Banks, Thomas	4^{00} pm	47235	115	Smith, Mary C.	9^{30} am
47245	106	Carter, Larry	4^{00} pm	47236	NSY	Smith, Baby Jane	9^{30} am
47246	L.R.	Allison, Susan	11^{30} pm	47240	103	Carter, John	10^{00} am
47247	L.R.	Hill, Faye	11^{00} pm				
47248	NSY	Hill, Baby Boy	11^{45} pm				
47249	NSY	Hill, Baby Boy	11^{51} pm				
47269	109	Murphy, Mary	10^{45} am				

RECEIVED by Transfer from Other Floor (Record Total on LINE 3 of Summary)				**DISCHARGED** by Transfer to Other Floor (Record Total on LINE 6 of Summary)			

DIED (Record Total on LINE 7 of Summary)

47230	110	Kelly, Peter	7^{15} pm

STILLBIRTHS (Not to be Recorded on Summary)

TRANSFERRED (Not to be Recorded on Summary)

FROM	TO	

SUMMARY FOR DAY

LINE NO.		NO. OF ADULTS & CHILDREN	NUMBER OF NEWBORN
1	Remaining Last Report	27	2
2	Admitted	6	2
3	Received by Transfer from Other Floor	–	–
4	TOTAL (Sum of lines 1, 2, & 3)	33	4
5	Discharged	3	1
6	Discharged by Transfer to Other Floor	–	
7	Died	1	
8	TOTAL OF DISCHARGES and DEATHS (Sum of lines 5, 6, & 7)	4	
9	Remaining 12:00 Midnight (Line 4 Minus Line 8)	29	3

Record the number of patients remaining at 12:00 Midnight (Line 9 of Summary of this report) on Line 1 of Summary of next day's report before sending this form to bookkeeping department.

SIGNED Sally Lakin, RN

FORM P-644

PHYSICIANS' RECORD CO., BERWYN, ILLINOIS - PRINTED IN U.S.A.

DAILY FLOOR CENSUS

For the 24 Hours Ended Midnight

FLOOR 1st SECTION Med - Surg - OB - NB - Ped DATE Oct 23, 1967

ADMITTED (Record Total on LINE 2 of Summary)

HOSP. NO.	ROOM NO.	NAME	TIME
47252	103^{I}	Lederle, Steve	7^{00} am
47253	103^{II}	Lederle, Stanley	7^{00} am
47254	101	Bethel, Mary	3^{00} pm
47255	110	Ames, Cheryl	5^{30} pm
47265	L.R.	Smith, Ann L.	8^{45} pm

DISCHARGED (Record Total on LINE 5 of Summary)

HOSP. NO.	ROOM NO.	NAME	TIME
47250	111	Murphy, Brian	9^{00} am
47245	106	Carter, Larry	11^{45} am

RECEIVED by Transfer from Other Floor (Record Total on LINE 3 of Summary)

DISCHARGED by Transfer to Other Floor (Record Total on LINE 6 of Summary)

DIED (Record Total on LINE 7 of Summary)

STILLBIRTHS (Not to be Recorded on Summary)

TRANSFERRED (Not to be Recorded on Summary)

FROM	TO		

SUMMARY FOR DAY

LINE NO.		NO. OF ADULTS & CHILDREN	NUMBER OF NEWBORN
1	Remaining Last Report	24	3
2	Admitted	5	0
3	Received by Transfer from Other Floor	0	0
4	TOTAL (Sum of lines 1, 2, & 3)	29	3
5	Discharged	2	0
6	Discharged by Transfer to Other Floor	0	0
7	Died	0	0
8	TOTAL OF DISCHARGES and DEATHS (Sum of lines 5, 6, & 7)	2	0
9	Remaining 12:00 Midnight (Line 4 Minus Line 8)	27	3

Record the number of patients remaining at 12:00 Midnight (Line 9 of Summary of this report) on Line 1 of Summary of next day's report before sending this form to bookkeeping department.

SIGNED Sally Lakin, RN

FORM P-644

PHYSICIANS' RECORD CO., BERWYN, ILLINOIS - PRINTED IN U.S.A.

DAILY FLOOR CENSUS

For the 24 Hours Ended Midnight

FLOOR 1st SECTION Med-Surg-OB-NB-Ped DATE Oct 22 1967

ADMITTED (Record Total on LINE 2 of Summary)

HOSP. NO.	ROOM NO.	NAME	TIME
47250	111	Murphy, Brian	1^{20} pm
47251	NSY	Allison, Baby Girl	2^{30} pm

DISCHARGED (Record Total on LINE 5 of Summary)

HOSP. NO.	ROOM NO.	NAME	TIME
47227	102	Jones, Louise	9^{05} am
47243	105	Brown, Terry	9^{30} am
47225	115	Morris, Janet	9^{30} am
47226	NSY	Morris, Baby Kim	9^{30} am
47244	107	Banks, Thomas	8^{00} am
47229	112	Allen, Mary	1^{00} pm
47218	101	Peters, Michelle	1^{10} pm

RECEIVED by Transfer from Other Floor (Record Total on LINE 3 of Summary)

DISCHARGED by Transfer to Other Floor (Record Total on LINE 6 of Summary)

DIED (Record Total on LINE 7 of Summary)

STILLBIRTHS (Not to be Recorded on Summary)

TRANSFERRED (Not to be Recorded on Summary)

FROM	TO		

SUMMARY FOR DAY

LINE NO.		NO. OF ADULTS & CHILDREN	NUMBER OF NEWBORN
1	Remaining Last Report	29	3
2	Admitted	1	1
3	Received by Transfer from Other Floor	–	–
4	TOTAL (Sum of lines 1, 2, & 3)	30	4
5	Discharged	6	1
6	Discharged by Transfer to Other Floor	–	–
7	Died	–	–
8	TOTAL OF DISCHARGES and DEATHS (Sum of lines 5, 6, & 7)	6	1
9	Remaining 12:00 Midnight (Line 4 Minus Line 8)	24	3

Record the number of patients remaining at 12:00 Midnight (Line 9 of Summary of this report) on Line 1 of Summary of next day's report before sending this form to bookkeeping department.

SIGNED Sally Lakin, RN

FORM P-644

PHYSICIANS' RECORD CO., BERWYN, ILLINOIS - PRINTED IN U.S.A.

DAILY FLOOR CENSUS

For the 24 Hours Ended Midnight

FLOOR 1st SECTION Med- Surg-OB-NB - Ped DATE Oct 24 1967

ADMITTED (Record Total on LINE 2 of Summary)

HOSP. NO.	ROOM NO.	NAME	TIME
47266	NSY	Smith, Baby Boy	4^{10} am
47256	107	Johnson, Alice	9^{30} am
47257	102	Shinn, Amanda	7^{00} am
47258	109	Weldon, Lonnie	10^{45} am

DISCHARGED (Record Total on LINE 5 of Summary)

HOSP. NO.	ROOM NO.	NAME	TIME
47229	105	Bettes, Harold	8^{30} am
47252	103^{I}	Lederle, Steven	9^{00} am
47253	103^{II}	Lederle, Stanley	9^{00} am
47254	101	Bethel, Mary	10^{15} am

RECEIVED by Transfer from Other Floor (Record Total on LINE 3 of Summary)

DISCHARGED by Transfer [illegible] Other Floor (Record Total on LINE 6 of Summary)

DIED (Record Total on LINE 7 of Summary)

STILLBIRTHS (Not to be Recorded on Summary)

TRANSFERRED (Not to be Recorded on Summary)

FROM TO

SUMMARY FOR DAY

LINE NO.		NO. OF ADULTS & CHILDREN	NUMBER OF NEWBORN
1	Remaining Last Report	27	3
2	Admitted	3	1
3	Received by Transfer from Other Floor	-	-
4	TOTAL (Sum of lines 1, 2, & 3)	30	4
5	Discharged	4	–
6	Discharged by Transfer to Other Floor	–	–
7	Died	–	–
8	TOTAL OF DISCHARGES and DEATHS (Sum of lines 5, 6, & 7)	4	0
9	Remaining 12:00 Midnight (Line 4 Minus Line 8)	26	4

Record the number of patients remaining at 12:00 Midnight (Line 9 of Summary of this report) on Line 1 of Summary of next day's report before sending this form to bookkeeping department.

SIGNED Sally Lakin RN

FORM P-644

PHYSICIANS' RECORD CO., BERWYN, ILLINOIS - PRINTED IN U.S.A.

DAILY FLOOR CENSUS

For the 24 Hours Ended Midnight

FLOOR 1st SECTION Med-Surg-OB-NB-Ped DATE Oct. 25 1967

ADMITTED (Record Total on LINE 2 of Summary)

HOSP. NO.	ROOM NO.	NAME	TIME
47259	LR	Debes, Sharon	4^{00} pm
47264	106	Sauxage, Sam	5^{30} pm

DISCHARGED (Record Total on LINE 5 of Summary)

HOSP. NO.	ROOM NO.	NAME	TIME
47246	116	Allison, Susan	9^{05} am
47251	NSY	Allison, Baby Ann	9^{05} am
47255	110	Ames, Cheryl	9^{45} am
47256	107	Johnson, Alice	10^{15} am
47258	102	Shinn, Amanda	10^{35} am

RECEIVED by Transfer from Other Floor (Record Total on LINE 3 of Summary)

DISCHARGED by Transfer to Other Floor (Record Total on LINE 6 of Summary)

DIED (Record Total on LINE 7 of Summary)

STILLBIRTHS (Not to be Recorded on Summary)

TRANSFERRED (Not to be Recorded on Summary)

FROM	TO		

SUMMARY FOR DAY

LINE NO.		NO. OF ADULTS & CHILDREN	NUMBER OF NEWBORN
1	Remaining Last Report	26	4
2	Admitted	2	–
3	Received by Transfer from Other Floor	–	–
4	TOTAL (Sum of lines 1, 2, & 3)	28	4
5	Discharged	4	1
6	Discharged by Transfer to Other Floor	–	–
7	Died	–	–
8	TOTAL OF DISCHARGES and DEATHS (Sum of lines 5, 6, & 7)	4	1
9	Remaining 12:00 Midnight (Line 4 Minus Line 8)	24	3

Record the number of patients remaining at 12:00 Midnight (Line 9 of Summary of this report) on Line 1 of Summary of next day's report before sending this form to bookkeeping department.

SIGNED Sally Lakin, RN

FORM P-644

PHYSICIANS' RECORD CO., BERWYN, ILLINOIS - PRINTED IN U.S.A.

209

DAILY FLOOR CENSUS

For the 24 Hours Ended Midnight

FLOOR 1st SECTION Med- Surg- OB - NB - Ped DATE Oct 26 1967

ADMITTED (Record Total on LINE 2 of Summary)

HOSP. NO.	ROOM NO.	NAME	TIME
47271	LR	Hawey, Paula	2^{30} am
47272	NSY	Hawey, Baby Girl	3^{00} am
47273	101	Lorenzo, Sophia	7^{00} am
47274	112	Sterling, Rodney	2^{30} pm

DISCHARGED (Record Total on LINE 5 of Summary)

HOSP. NO.	ROOM NO.	NAME	TIME
47258	109	Weldon, Lonnie	10^{15} am
47232	104	Miller, Cathy Sue	10^{40} am
47259	LR	Debes, Sharon	11^{25} am
47220	110	Hickson, John	12^{15} pm
47247	115	Hill, Faye M	2^{00} pm
47248	NSY	Hill, Kerry J.	2^{00} pm
47249	NSY	Hill, Larry K.	2^{00} pm

RECEIVED by Transfer from Other Floor (Record Total on LINE 3 of Summary)

47214	102	Barth, Carl	5^{30} am

DISCHARGED by Transfer to Other Floor (Record Total on LINE 6 of Summary)

DIED (Record Total on LINE 7 of Summary)

STILLBIRTHS (Not to be Recorded on Summary)

TRANSFERRED (Not to be Recorded on Summary)

FROM TO

SUMMARY FOR DAY

LINE NO.		NO. OF ADULTS & CHILDREN	NUMBER OF NEWBORN
1	Remaining Last Report	24	3
2	Admitted	3	1
3	Received by Transfer from Other Floor	–	–
4	TOTAL (Sum of lines 1, 2, & 3)	27	4
5	Discharged	5	2
6	Discharged by Transfer to Other Floor	0	0
7	Died	1	0
8	TOTAL OF DISCHARGES and DEATHS (Sum of lines 5, 6, & 7)	6	2
9	Remaining 12:00 Midnight (Line 4 Minus Line 8)	21	2

Record the number of patients remaining at 12:00 Midnight (Line 9 of Summary of this report) on Line 1 of Summary of next day's report before sending this form to bookkeeping department.

SIGNED Donna Ellsworth RN

FORM P-644

PHYSICIANS' RECORD CO., BERWYN, ILLINOIS - PRINTED IN U.S.A.

220

DAILY FLOOR CENSUS

For the 24 Hours Ended Midnight

FLOOR 1st SECTION Med - Surg - OB - NB - Ped DATE Oct. 27 1967

ADMITTED (Record Total on LINE 2 of Summary)

HOSP. NO.	ROOM NO.	NAME	TIME
47275	115	Jackson, Lewis	
47276	114	Carlson, Janet	
47277	102	O'Brien, Jerry	
47278	110	Adams, Carol	
47279	109	Blackburn, Oscar	

DISCHARGED (Record Total on LINE 5 of Summary)

HOSP. NO.	ROOM NO.	NAME	TIME
47263	108	Jones, Mary	9^{00} am
47264	106	Sausage, Sam	10^{30} am
47265	116	Smith, Ann L.	9^{45} am
47269	109	Murphy, Mary B.	1^{30} pm
47268	103	Horne, Peter	11^{35} am
47267	110	Blowe, Joe	1^{45} pm
47266	NSY	Smith, Baby Boy	9^{45} am

RECEIVED by Transfer from Other Floor (Record Total on LINE 3 of Summary)

DISCHARGED by Transfer to Other Floor (Record Total on LINE 6 of Summary)

DIED (Record Total on LINE 7 of Summary)

STILLBIRTHS (Not to be Recorded on Summary)

TRANSFERRED (Not to be Recorded on Summary)

FROM	TO	

SUMMARY FOR DAY

LINE NO.		NO. OF ADULTS & CHILDREN	NUMBER OF NEWBORN
1	Remaining Last Report	21	2
2	Admitted	5	0
3	Received by Transfer from Other Floor	0	0
4	TOTAL (Sum of lines 1, 2, & 3)	26	1
5	Discharged	6	1
6	Discharged by Transfer to Other Floor	0	0
7	Died	0	0
8	TOTAL OF DISCHARGES and DEATHS (Sum of lines 5, 6, & 7)	6	1
9	Remaining 12:00 Midnight (Line 4 Minus Line 8)	20	1

Record the number of patients remaining at 12:00 Midnight (Line 9 of Summary of this report) on Line 1 of Summary of next day's report before sending this form to bookkeeping department.

SIGNED Donna Ellsworth, RN

FORM P-644

PHYSICIANS' RECORD CO., BERWYN, ILLINOIS - PRINTED IN U.S.A.

CASE NO.	NAME	DOCTOR	RELIGION	INSURANCE	ADMITTED	DISCHARGED	DIAGNOSIS	AGE
47231	Blow, Joseph	Jones	Prot.	Bl. Cross	10-18-67	10-21-67	Pneumonitis.	47
47235	Smith, Mary E.	Jones	Luth.	Bl. Cross	10-17-67	10-21-67	Term pregnancy -- delivered.	23
47236	Smith, Baby Girl	Jones	Luth.	Bl. Cross	10-17-67	10-21-67	Term birth, living female infant.	NB
47240	Carter, John	Nelson	Meth.	None	10-16-67	10-21-67	Appendicitis. (operated)	15
47230	Kelly, Peter	Bland	Presby.	Medicare	10-1-67	10-21-67	CVA (pt. expired)	75
47227	Jones, Louise	Wright	Cath.	Mutual.	10-18-67	10-22-67	Diabetes mellitus, uncontrolled	30
47243	Brown, Terry	Nelson	Prot.	Bl. Cross	10-21-67	10-22-67	Admitted for T&A	6
47225	Morris, Jane	Bland	Cath.	Co. Ins.	10-18-67	10-22-67	Term pregnancy -- delivered.	19
47226	Morris, Baby Boy	Bland	Cath.	Co. Ins.	10-19-67	10-22-67	Term birth, living male infant	NB
47244	Banks, Thomas	Nelson	Prot.	Bl. Cross	10-21-67	10-22-67	Admitted for herniorrhaphy but discharged, not operated, because of mild URI.	35
47229	Allen, Mary	Jones	Prot.	Medicare	10-20-67	10-22-67	Admitted with hemoptysis; transferred to Colo.Gen., Denver	68
47218	Peters, Michelle	Jones	Prot.	Mutual.	10-9-67	10-22-67	Severe burns, 1st, 2nd degree, arms, face, neck and back.	3
47250	Murphy, Brian	Bland	Cath.	Bl. Cross	10-22-67	10-23-67	Brain concussion, slight.	14
47245	Carter, Larry	Nelson	Meth.	None	10-21-67	10-23-67	Fracture, left ankle	16
47229	Bettes, Harry	Nelson	None	CNA	10-19-67	10-24-67	Duodenal ulcer with hemorrhage Transferred to Presby. Hosp.	40
47252	Lederle, Steven	Bland	Meth.	Bl. Cross	10-23-67	10-24-67	Admitted for T&A	6
47253	Lederle, Stanley	Bland	Meth.	Bl. Cross	10-23-67	10-24-67	Admitted for T&A	7
47254	Bethel, Mary	Wright	Cath.	Mutual.	10-23-67	10-24-67	Possible appendicitis -- discharged, not operated; mesenteric adenitis.	10

CASE NO.	NAME	DOCTOR	RELIGION	INSURANCE	ADMITTED	DISCHARGED	DIAGNOSIS	AGE
47246	Allison, Sue	Wright	Presby.	None	10-21-67	10-25-67	Term pregnancy, delivered.	24
47251	Allison, Baby G.	Wright	Presby.	None	10-22-67	10-25-67	Term birth, living female infant.	NB
47255	Ames, Cheryl	Nelson	Cath.	Bl.Cross	10-23-67	10-25-67	Adm. for D&C following incomplete abortion.	21
47256	Johnson, Alice	Nelson	Prot.	Bl.Cross	10-24-67	10-25-67	Severe epistaxis.	57
47258	Shinn, Amanda	Bland	Meth.	Medicare	10-24-67	10-25-67	Adm. for excision, lesion, back of right hand, and of neck. Transferred back to Nursing Home.	82
47214	Barth, Carl	Jones	Meth.	Bl.Cross	10-11-67	10-26-67	Terminal carcinoma, lung. (Expired)	48
47258	Weldon, Lonnie	Bland	Prot.	Bl.Cross	10-24-67	10-26-67	Fracture, distal tibia & fibula, Rt.	14
47232	Miller, Cathy	Wright	Prot.	ADC	10-20-67	10-26-67	Acute pyelonephritis.	6
47259	Debes, Sharon	Wright	Luth.	None.	10-25-67	10-26-67	Term pregnancy-false labor.	21
47220	Hickson, John	Bland	Meth.	Bl.Cross	10-19-67	10-26-67	Cholecystitis, operated.	42
47247	Hill, Faye	Jones	Prot.	Bl.Cross	10-21-67	10-26-67	Term pregnancy, delivered twins	18
47248	Hill, Kerry J.	Jones	Prot.	Bl.Cross	10-21-67	10-26-67	Term birth, living male - twin 1.	NB
47249	Hill, Larry K.	Jones	Prot.	Bl.Cross	10-21-67	10-26-67	Term birth, living male - twin 2.	NB

Case No.	Name	Doctor	Religion	Insurance	Admitted	Discharged	Diagnosis	Age
7264	Sausage, Samuel	Nelson	Baptist	Co. Ins.	10-25-67	10-27-67	Fracture, right ankle	57
7265	Smith, Ann Louise	Newman	Methodist	Bl. Cross	10-23-67	10-27-67	Term pregnancy - Delivered	25
7266	Smith, Baby Boy	Newman	Methodist	Bl. Cross	10-24-67	10-27-67	Term birth, living male child	NB
7263	Jones, Mary Lou	Brown	Prot.	Bl. Cross	10-26-67	10-27-67	Admitted for T&A	10
7269	Murphy, Mary B.	Brown	Catholic	None	10-21-67	10-27-67	Acute Pneumonia	47
7268	Horne, Peter A.	Nelson	Prot.	Mutual	9-14-67	10-27-67	Admitted for Gastric Resection	32
7267	Blowe, Joseph H.	Brown	Prot.	Medicare	10-5-67	10-27-67	CVA; gen. arteriosclerosis (Patient expired)	80

HOSPITAL STATISTICS

HOSPITAL STATISTICS

I. Topic: Hospital Statistics.

II. Objectives: The objectives are to provide a better understanding of the importance of accurate statistical reports, to learn how to acquire the necessary information to complete the reports, and to learn how the information is to be used.

III. Activities: Lecture.

A. Medical statistical data in the hospital are primarily gathered from the medical record. Statistical reports are required by the governing board, by the hospital administrator, and by the accrediting agencies.

B. A method or procedure for collecting the data must be established. Daily cumulative tabulation of data will provide the most accurate record. Data are collected from the medical records of discharged patients and from the daily census of admissions and discharges.

C. Key words for statistical data are: what, why, how, and when.

1. What information do we need?
2. Why do we need certain information?
3. How are we going to use this information?
4. When do we get the information and when do we need it?

D. What information is desired by whom?

1. Hospital statistics--determination of basic data.
    a. Requirements of the accrediting agencies.
    b. Collection of data (method).
    c. Uniformity of data.
2. Vital statistics.
    a. Birth certificates.

b. Death certificates.

c. Fetal death certificates.

E. Analysis of hospital service.

1. Discharge analysis procedure.

2. Monthly and annual reports.

F. Computation of percentages and rates most frequently computed.

IV. Assignment: None.

V. References:

Elstad, Rudolph, "How to Make a Smaller Hospital's Annual Report a Big Success," Hospitals 22:30-34, June 1, 1948.

Handbook on Accounting Statistics and Business Office Procedures for Hospitals, Section 1, American Hospital Association, Chicago, 1950.

Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Physician's Record Co., Berwyn, 1963.

Hoffman, Robert G., "How to Make Your Statistics Work for You," Modern Hospitals 91:69-73, September, 1958.

Hospital Handbook on Birth and Fetal Death Registration, National Center for Health Statistics, Health, Education, and Welfare and Public Health Service, U. S. Government Printing Offices, Washington, D.C., 1967.

International Recommendations on Definitions of Live Birth and Fetal Death, Federal Security Agency, Public Health Service, National Office of Vital Statistics, Washington, D. C., Public Health Service Publication 39:6, 1950.

Levine, Eugene, "The ABC's of Statistics," American Journal of Nursing 59:71, January, 1959.

Physicians Handbook on Death and Birth Registration, 11th Ed., National Office of Vital Statistics, Health, Education, and Welfare and Public Health Service, U. S. Government Printing Office, Washington, D. C., 1963.

STATISTICS

Medical statistical data in the hospital is gathered, primarily, from the medical record. Statistical reports are required by the Governing Board, the Hospital Administrator, and the Accrediting Agencies.

A method of procedure for collection of data must be decided upon. Daily cumulative tabulation of data will provide the most accurate reports. Data is collected from the medical records of discharged patients, and from the daily census of admissions and discharges.

Our aim is to provide a better understanding of the importance of accurate statistical reports, how to acquire the necessary information. We will then proceed to--"what to do with the acquired information"--what, why, how, and when. These are the key words to our statistical course.

1. What information do we need?
2. Why do we need certain information?
3. How are we going to use this information?
4. When do we get the information and when do we need the information?

The first week of the institute we will discuss basic analysis of hospital service in light of what information is desired by whom.

The second week of the institute we will discuss accumulation of statistical data.

The last week of the institute we will work actual problems of percentages, rates, and averages as required by the accrediting bodies.

Information acquired in keeping with the desires of the accrediting agencies will usually satisfy the needs of your Governing Board and your Hospital Administrator.

Over the years there has been a growing awareness of the necessity for an accreditation program for the promotion of higher standards of hospital care. As a result of this, on December 6, 1952, the Joint Commission on Accreditation of Hospitals assumed the responsibility of evaluating hospitals for accreditation.

The Joint Commission on Accreditation of Hospitals is a licensed corporation composed of four health organizations, namely:

The American College of Surgeons - 3 votes.
The American College of Physicians - 3 votes.
The American Hospital Association - 7 votes.
The American Medical Association - 7 votes.

There are seven commissioners, each appointed by the organization they represent.

Residency accrediting agencies such as The American College of Surgeons and The American Medical Association require certain statistics also. Generally, the small hospitals do not have residency programs. If your hospital does have to meet requirements for these agencies, the statistics accumulated for the Joint Commisssion on Hospital Accreditation are usually sufficient to satisfy other agencies.

VITAL STATISTICS

The first study of vital statistics was called "bills of mortality" published by Captain John Graunt in 1661. Included were lists of burials, marriages, and baptisms. This study revealed that the urban death rate is usually higher than rural and male births exceed female. Due to a greater number of male deaths there are approximately equal numbers of both sexes in the population.

Statistics are only as accurate as the original document from which they are collected. The medical record department is responsible for the accuracy and promptness of reporting births, deaths, and fetal deaths. A copy of each is sent from the state office of vital statistics to the National Office of Vital Statistics, Public Health Service, Washington, D. C.

Registration of births provides necessary information in may instances, such as:

1. Proof of date and place of birth. This may be important for:

    A. Citizenship.
    B. Inheritance claims.
    C. Dependency claims.
    D. Insurance settlements.
    E. School entrance.
    F. Military service.
    G. Licenses of various kinds.

Registration of deaths provides necessary information, such as:

1. Providing date, place, cause, and circumstances of death for:

    A. Sickness insurance claims for last illness.
    B. Life insurance claims.

World Health Organization and the Committee on Hospital Statistics have set forth the terms of uniform definitions of fetal deaths (formerly termed stillbirths and abortions) and immature infants (formerly termed premature infants). These terms were adopted by the Third World Health Assembly in June, 1950.

Definitions of the new terms are found in the Manual for Medical Record Librarians, Edna K. Huffman, R.R.L., 5th Edition, page 361.

Familiarize yourself with state laws concerning reporting of illegitimate births. Pamphlets containing this information may be obtained free of charge from your local health department or by writing to:

Bureau of Vital Statistics
Colorado State Department of Health, Education, and Welfare
4210 East 11th Avenue
Denver, Colorado 80220

Titles of pamphlets to be procured are:

> "Physicians' Handbook on Death and Birth Registration," 11th Edition.
>
> (Also request Chapter 66, Article 8, "Vital Statistics" and the memoranda to local registrars dated April 21, 1967 and July 19, 1966.)
>
> "Hospital Handbook on Birth and Fetal Death Registration."

Both pamphlets are published by the U. S. Department of Health, Education, and Welfare, Public Health Service, National Center for Health Statistics, Washington, D. C., 20201.

COLLECTION AND UNIFORMITY OF DATA

Statistics are facts represented by figures. There are two types collected in the hospital--financial and medical. We are primarily concerned with medical statistics.

Only if statistical reports are accurate, reliable, specific, clear, and concise will they be of value. They are used in evaluating past performances as compared with present performance and in projecting into the future.

Basic information to be collected by medical record personnel is of two kinds: (1) Reports needed by the governing board, and (2) Reports required by various agencies, including the accrediting agencies.

In collection and tabulation, common sense is the chief requisite and experience the chief teacher.

The reports to be discussed are routine reports collected on a routine basis. However, you may be asked for special reports peculiar to your own hospital or community. Since any medical statistical report can only be as accurate as the medical records from which they are compiled, the responsibility for their accuracy must rest with the attending physicians.

The primary source of medical statistical data in the hospital is the medical record. The collection of such data from the medical records is primarily the responsibility of the medical record clerk. She should periodically analyze the uses made of the material she gathers in order not to spend time on unnecessary detail. A review of the reports required from the medical record department may bring out the fact that certain information is no longer considered necessary.

After having determined the content of the reports that must be submitted, a method of procedure for the collection of data must be decided upon. Tabulation of data is the first step in preparing any statistical report.

Usually, if a report is easy to prepare, it is generally most accurate because the smaller the number of data collected at any one time the less chance there is for error. For this reason, a daily cumulative tabulation of data will provide the most accurate reports. The logical procedure, then, is to assure that the records of discharged patients are received in the medical record department the day following discharge. Daily tabulation must be made from these records.

Data must be posted to Daily Analysis of Hospital Service Work Sheets. As soon as data from the records of the last day of the month has been posted, the figures are ready for transfer to the monthly analysis of hospital service forms. Analysis of hospital service is a gross appraisal of the efficiency of the hospital and the medical staff. This information is primarily for the benefit of and use by the hospital. It is intended to give a picture of the type of illnesses cared for by the hospital and their end results. The assignment of the service in the discharge analysis may be based on the final diagnosis made on discharge of the patient in the smaller hospital; or on the service treating the patient in the large, highly specialized hospitals. It is only from the final diagnosis and the results on discharge that a true picture of the work of hospitals can be attained.

While the number of departments in a hospital may vary with the size of the hospital and the type of work done, a hospital of 75 beds or over must have a minimum of three services--Medicine, Surgery, and Obstetrics.

A newborn service is necessary for statistical purposes because infants newly born in the hospital should not be grouped in the three basic departments.

Under the three services named above, the following classifications usually apply:

MEDICINE

- Allergy
- Cardiology
- Communicable Disease
- Dermatology
- Gastroenterology
- Neurology
- Pediatrics
- Psychiatry
- Pulmonary Disease
- Malignant Disease

SURGERY

- Fractures
- Gynecology
- Neurosurgery
- Ophthalmology
- Orthopedics
- Otology
- Otolaryngology
- Pediatrics
- Plastic Surgery
- Proctology
- Thoracic Surgery
- Traumatic Surgery
- Malignant Disease

These services are defined as follows:

(Medicine)

Allergy--To include cases having a condition due to hypersensitivity to specific allergens.

Cardiology--To include cases having a disease of any part of the cardiovascular system, which includes the heart, conduction systems, arteries, veins, and capillaries.

Communicable Disease--To include all transmissible diseases in the customary acceptance of the term. The reporting of communicable diseases is required by all states in the United States and by most of the countries of the world.

Dermatology--To include all diseases and conditions of the skin.

Gastroenterology--To include all diseases and conditions of the digestive system except the anus, rectum, and sigmoid colon.

Neurology--To include all diseases of the central, peripheral, and sympathetic nervous systems except those which require operative treatment.

Pediatrics--(children)--To include all diseases and conditions of children under 14 which offer special problems because of their occurrence in this age group, except newborn infants born in the hospital, children with diseases of the eye, ear, nose, and throat, orthopedics, communicable diseases, and diseases of other specialties. Newborn infants brought to the hospital after delivery are counted in this classification.

In some hospitals a count of all children under 14 must be kept regardless of the condition for which they are hospitalized. The maximum age for pediatrics varies with health agencies, some include children up to 16. For this reason the age requirement in your particular area must be determined and the age entered accordingly in this service.

Many hospitals do not keep a pediatric count if there is no organized pediatric service. Others divide all service classifications in their discharge analysis into adults and children. However, unless required this entails considerably more work and produces a more complicated monthly report.

Psychiatry--To include all cases of mental disorder.

Pulmonary Disease--To include any disease of the chest (lungs).

Malignant Disease--To include any neoplastic disease that becomes malignant.

(Surgery)

Fractures--To include a sudden breaking of a bone whether it be traumatic, pathological, or surgically induced.

Gynecology--To include all diseases and conditions of the female generative and urinary organs, and the rectum if it is a part of the disease syndrome of the generative organs. Diseases of the breast and diseases and conditions associated with pregnancy and the puerperium are not included.

Neurosurgery--To include all diseases of the central, peripheral, and sympathetic nervous systems treated by surgical measures.

Ophthalmology--To include all diseases, injuries, and conditions of the eye and supporting structures regardless of types of therapy, except tumors, venereal diseases, and some communicable diseases.

Orthopedics--To include all diseases and conditions of the bones, joints, muscles, fasciae, tendons, and their nerve control which affect motion and are not acutely traumatic in nature. If a traumatic count is kept, all new fractures should be entered under traumatic surgery and old fractures in orthopedics. If a fracture count is made, both would be counted fractures.

Otology--To include any diseases limited to the ear.

Otolaryngology--To include all diseases of the ear, nose, throat, larynx, pharynx, nasopharynx, and tracheobronchial tree.

Pediatrics--(See above definition under medicine).

Plastic Surgery--To include all cases of surgery concerned with repair for the restoration of deformed or mutilated parts of the body, often involving transfer of tissue from one part of the body to another.

Proctology--To include all diseases and conditions of the rectum, anus, and sigmoid colon, unless they are a part of the disease syndrome of the female generative organs (see above under gynecology).

Thoracic Surgery--To include all diseases of the chest in which surgery of any type is performed.

Traumatic Surgery--To include any surgery having to be performed due to trauma incurred by the patient.

Malignant Disease--To include any neoplastic disease that becomes malignant which requires surgical intervention.

Hospitals without interns and residents need not prepare reports in detail, but should have medicine, surgery, and obstetrics. Service assignments that are based on the final diagnosis according to a definite pattern will give a consistent picture of the work done in the hospital without specialized services and will be valid for use in monthly or annual comparison.

From our daily work, we compile monthly reports, quarterly reports, and annual reports. Some hospitals work on a calendar year basis while others work on a fiscal year basis.

Monthly analysis of hospital services is based strictly on hospital admissions and discharges. Outpatient should be counted on a separate report. From the daily cumulative statistics we compute other statistics, averages, and percentages.

Percentage is a name applied to calculations on which the fractional parts are transformed into units of 100. For example, two-place decimal fractions are parts of 100 and can be expressed as percent by moving the decimal point two places to the right. The decimal fraction .25 reads as 25 divided by 100, and can be changed to percent by moving the decimal point two places to the right, which converts the decimal fraction .25 to 25. of 25 units. The % symbol is then added as 25%. Percentages can not always be worked out to whole numbers. If a fraction remains, it is usually rounded off. It is discounted if it is less than one half, and is raised to a full unit if it is one half or over. If a percentage works out .164 or 16.4%, the fraction is discounted; but if it works out .165 or 16.5% or over, it becomes 17%. A rule is then: Drop a decimal if it is under one half, add a full unit if the decimal is one half or over.

Rates most frequently computed are as per following formulae.

HOSPITAL STATISTICS

NOTE: This supplement is intended to draw your attention to variations in the way certain items are computed by (1) JCAH; (2) Huffman; (3) AMA; (4) AHA. It is also intended to point out the averages and/or rates that are computed in the same fashion by all.

1. AVERAGE LENGTH OF STAY:

   a. Huffman, p. 390: average length of stay for inpatients.

   $$\frac{\text{Total No. of inpatient days' care rendered to discharged patients (ex. N.B.)}}{\text{Total No. of inpatients who were discharged or who died (ex. N.B.)}}$$

   b. JCAH: survey report: no formula given; newborn excluded from average length of stay.

   c. AHA: Uniform Chart: same as Huffman.

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2. DEATHS:

   a. Gross Death Rate:

      (1) Huffman, p. 382.

      $$\frac{\text{Total No. of deaths for the period} \times 100}{\text{Total No. of discharges (and deaths) for the period}} = \%$$

      (2) JCAH: same as Huffman.

      (3) AHA: no formula given.

   b. Net Death Rate:

      (1) Huffman, p. 382.

      $$\frac{\text{Total deaths 48 hours or over for the period} \times 100 = \%}{\text{Total deaths over 48 hours and discharges for the period}}$$

      (2) JCAH: survey report, p. 4.

      $$\frac{\text{deaths} \times 100 = \%}{\text{discharges}}$$

      (Subtract deaths under 48 hours from both numerator and denominator.)

(3) AHA: no formula given.

c. Maternal Death Rate: (or Maternal Mortality Rate):

(1) Huffman, p. 383.

$$\frac{\text{Total No. of deaths of obstetrical patients for the period} \times 100 =}{\text{Total No. of discharges (and deaths) of obstetrical patients for that period}}$$

(2) JCAH: survey report, p. 8.

$$\frac{\text{maternal deaths} \times 100 = \%}{\text{obstetrical discharges}}$$

(3) AHA: no comment.

Note: JCAH and Huffman agree, if you recall that "obstetrical" refers to delivered, not delivered, and aborted.

d. Infant Death Rate: (or Infant Mortality Rate):

(1) Huffman, p. 384.

$$\frac{\text{Total No. of deaths of infants born in the hospital for a period} \times 100 = \%}{\text{Total No. of viable newborn infants discharged (including deaths) for the period}}$$

(2) JCAH: survey report, p. 8.

$$\frac{\text{newborn deaths} \times 100 = \%}{\text{live births}}$$

(3) AHA: no comment.

e. Perinatal Mortality Rate:

(1) Huffman: no comment.

(2) JCAH: no comment.

(3) AHA: no comment.

(4) Committee on Maternal and Child Care of the Council on Medical Service, American Medical Association, pp. 7, 10-11.

The Perinatal Mortality Rate is to be calculated on the basis of total births in the perinatal period chosen for study. However, for those using Perinatal Period II, it is necessary to calculate and report both the Perinatal Period I and Perinatal Period II rates. This is to insure that the Perinatal Period II rate of one study will not be confused and wrongly compared with the Perinatal Period I rate of another study, and in order that all studies reported in the United States may be compared on a common basis with each other, and in turn with the rates of other countries, many of which use Perinatal Period I in calculating their perinatal mortality rates. Perinatal Mortality is defined as those deaths of fetuses and newborn infants.

Perinatal Period I rate is calculated by the following formula:

$$\frac{\text{Hebdomadel deaths and Fetal deaths 1001 grams and over} \times 1000}{\text{Live births and Fetal deaths 1001 grams and over}}$$

Perinatal Period II rate is calculated by the following formula:

$$\frac{\text{Neonatal deaths and Fetal deaths 501 grams and over} \times 1000}{\text{Live births and Fetal deaths 501 grams and over}}$$

The proportion of deaths of the various component parts and subparts of the perinatal period (such as hebdomadal and posthebdomadal in the neonatal, and antepartum and intrapartum in the fetal) should be calculated on the basis of total births in question as used in calculating the particular total perinatal mortality rate that is under consideration.

These component proportions are to be compiled in addition to--and the neonatal proportion is not to be considered a substitute for--the well established neonatal death rate which traditionally and accurately has been calculated on the basis of live births only. The purpose of calculating component proportions of the total perinatal mortality rate for either Perinatal Period I or Perinatal Period II as outlined above is to provide more accurate statistical data to better delineate the problem of the perinatal period.

f. Postoperative Death Rate:

(1) Huffman, p. 383.

$$\frac{\text{Total No. of deaths within 10 days postoperative for a period} \times 100 = \%}{\text{Total No. of patients operated upon during that period}}$$

(2) JCAH: survey report, p. 7.

$$\frac{\text{number of deaths within 10 days of surgery} \times 100 = \%}{\text{number of operations}}$$

(3) AHA: no comment.

Note: JCAH and Huffman agree, although the wording of the formula differs.

g. Anesthesia Death Rate:

(1) Huffman, p. 383.

$$\frac{\text{Total No. of anesthesia deaths for the period} \times 100 = \%}{\text{Total No. of anesthetics administered for the period}}$$

(2) JCAH: survey report, no comment.

(3) AHA: no comment.

3. AUTOPSIES:

a. Gross Autopsy Rate:

(1) Huffman, p. 388.

$$\frac{\text{Total autopsies for a given period} \times 100 = \%}{\text{Total deaths for a given period}}$$

(2) JCAH: survey report, no comment.

(3) AHA: no comment.

b. Net Autopsy Rate:

(1) Huffman, p. 388.

$$\frac{\text{No. of autopsies for a period} \times 100 = \%}{\text{Total No. of deaths minus unautopsied coroner's or medical examiner's cases}}$$

Huffman notes: (p. 389): "If the coroner's cases had been autopsied at the hospital and had thus become available for teaching purposes, they would have been counted as net autopsies just as any death with autopsy that was not determined to be a coroner's case."

(2) JCAH: survey report, no comment.

(3) AHA: no comment.

c. Autopsy Rate on Deaths Over 48 Hours:

(1) Huffman: no comment.

(2) JCAH: no comment, although this statistical item is required; suggested formula:

$$\frac{\text{No. of autopsies on deaths over 48 hours during the period} = \%}{\text{No. of deaths over 48 hours during the period}}$$

(3) AHA: no comment.

4. DAILY AVERAGE NUMBER OF PATIENTS (or AVERAGE DAILY CENSUS): (from the census)

a. Huffman, p. 395.

$$\frac{\text{Total No. of inpatient days' care for the period (ex. of newborn)}}{\text{Total No. of days in the period}}$$

b. JCAH: survey report: no comment.

c. AHA: Handbook, p. 19.

$$\frac{\text{No. of patient days (other than newborn) during a period}}{\text{No. of calendar days in the period}}$$

Note: Huffman and AHA agree, although formula differs.

5. PERCENTAGE OF OCCUPANCY: (from the census)

a. Huffman, p. 396.

$$\frac{\text{actual patient-days care (exclusive of newborn) for a given period} \times 100 = \%}{\text{maximum patient-days care (ex. bassinets) for the period}}$$

b. JCAH: survey report, p. 3.

$$\frac{\text{average daily census} \times 100 = \%}{\text{bed complement}}$$

JCAH Note: "bed complement - actual number of beds available for use at present time."

c. AHA: Uniform Chart, p. 19-21.

actual patient days during the period x 100 = %
maximum patient days (as determined by bed capacity)
during the period

6. CESAREAN SECTION RATE:

a. Huffman, pp. 389-390.

Total No. of cesarean sections performed for the period
x 100 = %
Total No. of births for the period

b. JCAH: survey report, p. 8.

No. of sections x 100 = %
No. of deliveries

c. AHA: no comment.

7. CONSULTATION RATE:

a. Huffman, pp. 362-363.

Total No. of patients receiving consultations x 100 = %
Total No. of patients discharged, including deaths,
during the period

b. JCAH: see Huffman, p. 363.

Total patients receiving consultations for the period
x 100 = %
Total patients discharged (including deaths) for that
period

c. AMA: see Huffman, pp. 363, 364.

Total No. of consultations given x 100 = %
Total patients discharged (including deaths) for that
period

Note: JCAH wants percentage of patients receiving consultation, regardless of the number of consultations per patient; AMA wants consultations given, regardless of the number of patients receiving consultations. . .(Huffman, p. 363).

8. INFECTION RATE: (also called MORBIDITY RATE):

a. Gross Infection Rate, or Gross Morbidity Rate:

(1) Huffman, p. 386.

Total No. of infections for period x 100 = %
Total No. of patients discharged (incl. deaths)
during the period

(2) JCAH: survey report, no comment.

(3) AHA: no comment.

b. Net Infection Rate, or Morbidity Rate:

(1) Huffman, p. 387.

Total No. of infections debited against the hospital
for a given period x 100 = %
Total No. of patients discharged (including deaths)
for that period

(2) JCAH: survey report, no comment.

(3) AHA: no comment.

c. Postoperative Infection Rate for Clean Surgical Cases:

(1) Huffman, p. 387.

Total No. of infections in clean surgical cases
for a given period
Total No. of operations for that period

(2) JCAH: survey report, p. 7.

No. of infections in clean cases c 100 = %
No. of operations

(3) AHA: no comment.

9. NEONATAL DEATH RATE:

a. Huffman, p. 384.

Total No. of infant deaths occurring within 28 days of
birth for a given period x 100 = %
Total No. of viable newborn infants discharged (inc.
deaths) during the period

Note: Follow-up system necessary to accurately determine number of infants who die within the 28-day period after birth, but after discharge from the hospital.

b. JCAH: no comment.

c. AHA: no comment.

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10. FETAL DEATH RATE:

a. Huffman, p. 384.

In hospital statistics, fetal deaths fall into two groups:

(1) fetal deaths of less than 20 weeks gestation (abortions)
(2) fetal deaths of 20 or more weeks gestation (stillbirths)

Rates are computed for stillbirths, usually, as follows:

$$\frac{\text{Total No. of deaths of infants (born in the hospital) for the period} \times 100 = \%}{\text{Total No. of infant discharges (including deaths) for the period}}$$

Note: total births = live births plus stillbirths

b. JCAH: survey report, no comment.

c. AHA: no formula.

BIBLIOGRAPHY:

American Hospital Association: Uniform Hospital Definitions, 1963.

Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., 1963, Physicians' Record Co., Berwyn.

Joint Commission on Accreditation of Hospitals: Survey Report: Part II questionnaire to be completed by the hospital prior to visit of JCAH field representative, 1958.

HOSPITAL STATISTICS

AVERAGE LENGTH OF STAY is the average number of days of service rendered to each inpatient discharged during a given period. (AHA)

Reference: Uniform Hospital Definitions, AHA.

MONTH	PTS. DISCHARGED	DAYS CARE TO PTS.	AVERAGE LENGTH OF STAY
Jan.	1918	7860	
Feb.	1662	6968	
Mar.	1758	6491	

THE AVERAGE DAILY CENSUS is the average number of inpatients maintained in the hospital each day for a given period of time. (AHA)

MONTH	PT.DAYS AD.&CH.	PT.DAYS NEWBORN	TOT.PT.DAYS AD.,CH.&NB.	AV.DAILY CENSUS ALL PTS.	AV.DAILY CENSUS AD.&CH.	AV.DAILY CENSUS NEWBORN
Jan.(31)	5493	923				
Feb.(28)	4452	757				
Mar.(31)	5847	986				

THE PERCENTAGE OF OCCUPANCY is the ratio of actual patient days to the maximum patient days, as determined by bed capacity, during any given period of time. (AHA)

DIRECTIONS: Compute the percentage of occupancy for the hospital with 150 beds and 30 bassinets.

MONTH	PT.DAYS AD.&CH.	PT.DAYS NEWBORN	% OF OCCUP. AD.&CH.	% OF OCCUP. NEWBORN	% OF OCCUP. AD.,CH.&NB.
Jan.	5493	923			
Feb.	4452	757			
Mar.	5847	986			

THE PERCENTAGE OF OCCUPANCY is the ratio of actual patient days to the maximum patient days as determined by bed capacity, during any given period of time. (AHA)

DIRECTIONS: Compute the percentage of occupancy for each of the following hospitals (X, Y, Z).

HOSP.	BEDS	PT. DAYS OF SERVICE AD. & CH.	BASSINETS	PT. DAYS OF SERVICE NEWBORN	PERCENTAGE OF OCCUP. AD. & CH.	PERCENTAGE OF OCCUP. NEWBORN
X	256	6262	44	713		
Y	160	3937	24	558		
Z	340	9672	32	775		

AUTOPSY RATE is the ratio of autopsies to deaths. (Huffman)

GROSS AUTOPSY RATE is the ratio during any given period of time of all autopsies to all deaths. (Huffman)

NET AUTOPSY RATE is the ratio of total autopsies for a given period of time to total number of deaths minus the medical examiner's cases for that period which were not autopsied at the hospital. (Huffman)

MONTH	DEATHS	MEDICAL EXAMINER'S CASES	AUTOPSIES ALL CASES	MED. EXAM. CASES, AUTOP. AT HOSPITAL	GROSS AUTOPSY RATE	NET AUTOPSY RATE
Jan.	16	0	9	0		
Feb.	10	2	5	1		
Mar.	21	3	12	2		

GROSS DEATH RATE is the ratio of deaths in a hospital during any given period of time to the total number of discharges and deaths during that time. (Deaths are included in figures listed under "total discharges.")

MONTH	TOTAL DISCHARGES & DEATHS	DEATHS	GROSS DEATH RATE
Jan.	892	16	
Feb.	748	10	
Mar.	985	21	

NET DEATH RATE (or INSTITUTIONAL DEATH RATE) is the ratio of the total number of deaths occurring in the hospital 48 hours or over after admission to the total number of discharges and deaths during that time. When computing the net death rate, the number of deaths occurring under 48 hours is subtracted from the total number of discharges and deaths. (Note: Deaths are included in figures listed under "total discharges.")

MONTH	TOT. DISCHARGES & DEATHS	DEATHS UNDER 48 HOURS	DEATHS OVER 48 HOURS	NET DEATH RATE
Jan.	892	2	14	
Feb.	748	2	8	
Mar.	985	9	12	

MATERNAL DEATH RATE (JCAH) is the ratio of maternal deaths during any given period of time to the total number of obstetric patients discharged during that time.

If the total number of obstetric patients discharged during the year included 2,288 mothers delivered, 137 mothers aborted, and 373 mothers who were discharged undelivered, and one of these obstetric patients died during the year, what is the maternal death rate for the year?

____

INFANT DEATH RATE (or INFANT MORTALITY RATE) (JCAH) is the ratio of deaths of infants born in the hospital during a given period of time to live births (including deaths) during that time.

MONTH	LIVE BIRTHS	DEATHS	INFANT DEATH RATE
Jan.	154	1	
Feb.	127	2	
Mar.	188	4	

CESAREAN SECTION RATE (JCAH) is the ratio of Cesarean Sections performed in a given period to the total number of deliveries in that period.

MONTH	TOTAL DELIVERIES	CESAREAN SECTIONS	C/S RATE
Jan.	159	3	
Feb.	117	1	
Mar.	175	2	

POSTOPERATIVE DEATH RATE is the rate of deaths attributable to, or precipitated by, an operation, such as deaths from hemorrhage, shock, embolism, infection, postoperative pneumonia, etc., and occurring within the convalescence, which is usually regarded as being within the first ten days postoperative.

MONTH	OPERATIONS (PATIENTS OPERATED)	POSTOPERATIVE DEATHS	POSTOPERATIVE DEATH RATE
Jan.	392	5	____________
Feb.	255	2	____________
Mar.	355	5	____________

ANESTHESIA DEATH RATE is the ratio of anesthetic deaths (those occurring on the operating table and caused by anesthetic agents, no surgical complication) during any given period of time to the total number of anesthetics administered during that time.

(NOTE: "ANESTHETIC ADMINISTERED" MEANS "PATIENTS RECEIVING ANESTHETICS")

YEAR	ANESTHETICS ADMINISTERED	DEATHS	ANESTHETIC DEATH RATE
1965	3,796	1	____________
1966	5,740	1	____________
1967	6,480	1	____________

FETAL DEATH (STILLBIRTH) RATE is the ratio of the total fetal deaths (stillbirths) to the total number of births, during the period.

MONTH	TOTAL BIRTHS	STILLBIRTHS (FETAL DEATHS)	STILLBIRTH RATE FETAL DEATH RATE
Jan.	149	1	____________
Feb.	130	3	____________
Mar.	184	2	____________

Sample illustrating computation of daily cnesus and patient days of service rendered each day.

ADULT AND CHILDREN CENSUS
SUNSHINE HOSPITAL

	July 3	July 4	July 5	July 6	July 7
Pt. Rem. at Midnight Beginning of Day	295	298	304	329	326
Admissions for the Day (Midnight to Midnight)	25 320	30 328	47 351	35 364	30 356
Discharges (and Deaths) for the Day	-16	-27	-16	-24	-28
Pt. Rem. at Midnight End of Day (census)	304	301	335	340	328
No. of Pt. Adm. and Dis. during the Day	1	2	3	4	2
TOTAL PT. DAYS OF SERVICE RENDERED PER DAY	305	303	338	344	330

Total Pt. Days of Service Rendered for 5-Day Period:	1044
Hospital Bed Capacity	225

What is the average daily census for the five-day period?_______

What formula did you use to obtain this average?_______________

What is the percentage of occupancy for the five-day period?___________________________________

What formula did you use to obtain this percentage?_____________

COMPUTATION OF PERCENTAGES

Statistics are facts represented by figures. It is the collection, presentation, analysis, and interpretation of numerical data. You have learned how to compile statistics from the discharge analysis, now we will compute these figures.

Percentages

Per centum is a Latin phrase meaning "by the hundred." Thus a percentage is a fraction whose denominator is 100. It may be written as a decimal fraction .54 or with the percent sign 54%.

Remember, in the first week of Statistics it was pointed out that any decimal fraction may be converted to a percentage by the following rule: Move the decimal point two places to the right and add the percent sign; any percentage may be written as a decimal by moving the decimal point two places to the left and dropping the percent sign.

Any common fraction may be written as a percentage by dividing the numerator by the denominator, multiplying the quotient by 100 (moving the decimal point two places to the right) and adding the percent sign).

Example: Write as a decimal and as a percentage 33/35.

$$\frac{.941}{35/33.000} = .94 = 94\%$$

Remember the rate in this manner: A rate is the number of times a thing happens compared to the number of times it could have happened.

Then if you want to state this ratio as a percentage, you will divide the number of times something did happen by the number of times this same thing could have happened and multiply by 100.

Take, for instance, in a hospital where 300 operations were performed, 300 wound infections could have occurred. Since 15 would infections did occur, you divide 15 by 300 to get the infection rate (5%).

$$\frac{0.05}{300/15.00} \quad \text{or } 5\%$$

Now, before we work some problems let's go over a few definitions.

Patient Definitions

A HOSPITAL PATIENT is a person receiving physician, dentist, or allied services in a hospital. Hospital patients are divided into two major types:

A HOSPITAL INPATIENT is a patient who is given lodging in a hospital while receiving physician, dentist, or allied services in the hospital.

A HOSPITAL OUTPATIENT is a patient who is not lodged in a hospital while receiving physician, dentist, or allied services in the hospital.

Bed Facilities

A HOSPITAL BED is one regularly maintained in a hospital for the use of patients.

AN OUTPATIENT BED is one regularly maintained for use by outpatients in a patient center.

AN INPATIENT BED is one regularly maintained for use by inpatients who are receiving continual physician or dentist services and are lodged in continuous nursing service areas of the hospital.

ADULT BEDS are those assigned for regular use by inpatients who are 14 years of age or over, and which are maintained in areas allotted for adult or adolescent lodging, even though in some instances utilized by children.

CHILD BEDS are those assigned for regular use by patients other than newborn who have not reached the age of 14 years, and which are maintained in areas allotted for children's lodging.

NEWBORN BEDS are those assigned for regular use by infants newly born in the hospital and which are maintained in areas allotted for newborn infant lodging.

THE HOSPITAL INPATIENT BED CAPACITY is the number of beds regularly maintained for inpatients in a hospital.

ADULT BED CAPACITY is the number of inpatient beds regularly maintained, in areas intended for the lodging and full-time care of adult inpatients (even though in some instances utilized by children), during periods of normal operations.

CHILD BED CAPACITY is the number of inpatient beds regularly maintained, in areas intended for the lodging and full-time care of children and infants other than newborn, during periods of normal operations. This classification would be maintained only by those hospitals providing separate pediatric facilities.

NEWBORN BED CAPACITY is the number of inpatient beds regularly maintained, in areas intended for the lodging and full-time care of newborn infants, during periods of normal operations.

Inpatient Admission Classifications

AN INPATIENT ADMISSION is the formal acceptance by a hospital of a patient who is to receive physician, dentist, or allied services while lodged in the hospital.

An inpatient admission always involves the occupancy of a hospital bed, bassinet, or crib, by the patient, and the maintenance of a hospital chart for the patient. Only one hospital admission may be counted for an inpatient during the period of his continuing as an inpatient of the hospital. An inpatient transferred after admission from one service to another, e.g., from medical to surgical service, is to be counted as a transfer, not as a second admission. Similarly, an inpatient admitted under one financial classification and subsequently transferred to another is to be counted as a transfer. If a discharged inpatient appears for further physician, dentist, or allied services at a future time, this is counted as another admission.

When a person dies in the emergency room, prior to the granting of lodging by the hospital, such patient should be recorded as an outpatient.

Classification by Age

ADULT INPATIENT ADMISSIONS: those accepted for lodging in an adult bed facility.

CHILD INPATIENT ADMISSIONS: those accepted for lodging in a child bed facility.

NEWBORN INPATIENT ADMISSIONS: those newly born in the hospital and accepted for lodging in a newborn bed facility.

Discharges and Deaths

AN INPATIENT DISCHARGE is the termination of the granting of lodging and the formal release of an inpatient by the hospital.

Since deaths are a termination of the granting of lodging, they are also inpatient discharges, although recorded as a specific kind of discharge.

Detailed records should be maintained of inpatients' deaths occurring within or beyond 48 hours after admission.

Fetal deaths (stillbirths) should be separately stated.

Deaths occurring before admission as an inpatient, e.g., in the emergency room, are not classified as inpatient deaths. However, for the protection of the hospital and for completeness of data, a separate record of such must be kept.

A PATIENT DAY is the unit of measure denoting lodging facilities provided and services rendered to one inpatient between the census-taking hour on two successive days.

THE HOSPITAL INPATIENT CENSUS is the number of inpatients occupying beds in the hospital at a given time.

THE AVERAGE DAILY CENSUS is the average number of inpatients maintained in the hospital each day for a given period of time.

THE PERCENTAGE OF OCCUPANCY is the ratio of actual patient days to the maximum patient days, as determined by bed capacity, during any given period of time.

AVERAGE LENGTH OF STAY is the average number of days of service rendered to each inpatient discharged during a given period.

The total number of adults, children, and newborn infants should always be stated separately in any statistical count of inpatients which determines service and facilities provided.

Infants transferred from the newborn infant nursery to a pediatric nursery should be recorded as regular child inpatients from the time of such transfer.

Infants born outside the hospital should be recorded as child inpatients and not as newborn inpatients upon admission.

Newborn infants remaining in the newborn infant nursery after discharge of the mother should continue to be recorded as newborn patients.

LEGAL ASPECTS OF MEDICAL RECORDS

LEGAL ASPECTS OF MEDICAL RECORDS

I. Legal Aspects of Medical Records.

II. Objectives:

A. To teach the students that the medical record has both medical and legal aspects and they should be familiar with the principles and administration of law applicable to them.

B. It is hoped the students will understand the following on the legal aspects of a medical record: Property Right, Confidential Communications, Types of Cases Using Evidence from Medical Records, The Medical Record in Court, Acceptance of a Subpoena, Conduct as a Witness, Legal Acceptance of Microfilmed Records, Release of Information and Authorization for Certain Procedures.

C. The students must learn the policies regarding the release of medical information, whether it be in answer to a subpoena, in response to requests from governmental agencies, from the individual patients, from relatives of patients, or others.

III. Activities or Procedures:

Lecture, explanation, and discussion will be the procedure used. The students will be given questions on medico-legal aspects of the medical record for participation purposes and as a class project.

IV. Materials, Resources, and Bibliography:

A. No special equipment will be needed.

B. If a clearance is obtained, it is possible that an attorney will speak for a short period.

C. References will be:

Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Physicians' Record Co., Berwyn, 1963.

Hayt, Emanuel, and Hayt, Jonathan, Legal Aspects of Medical Records, Physicians' Record Co., Berwyn, 1964.

V. Assignment:

No assignment will be given as only one hour is devoted to this lesson.

VI. Summary and Evaluation:

A. Summarization will be made by pointing out the value and significance of knowing the legal aspects of medical records as practically applied in our daily professional activity.

B. Due to the brevity of this lesson, evaluation and whether or not the objectives have been obtained will rely heavily upon testing and follow-up instructor visits.

LEGAL ASPECTS OF MEDICAL RECORDS

Medicolegal science had its beginning in the early history of man. While the modern literature on this subject is written from the medical point of view for the most part, its earliest history is found in historic writings of a legal nature, in criminal codes, and records of court proceedings. Early Egyptian and Hindu literature indicates that many medical questions arose in the course of legal proceedings.

Relationship between the medical profession and judicial proceedings became so marked in the sixteenth and seventeenth centuries that this science began to be established on a firm foundation. By the eighteenth century, various continental universities had established professorships of medical jurisprudence.

Medical jurisprudence is the science of medical law. The increasing use of hospital records as evidence in the courts has made it necessary to include the legal aspects of medical records in the curriculum in the schools of medical record science.

Due to the fact that the laws on confidential communications vary in the different states, there is very little definite information written on the legal aspects of medical records. It is a shame to admit to this,but Colorado has the least information on legal aspects of medical records of any state about which I know. Nonetheless, I will attempt to give you the basic guidelines that are applicable anywhere and should be of help to you.

Property Right

The physical ownership of the medical record is vested in the hospital, and it in turn respects the right of privacy of the patient as concerns the confidential nature of the information contained therein and protects the patient from its unauthorized release.

A patient wishing to examine his record should be requested to consult his physician or obtain a written authorization from his physician. Many times it is not in the best interest of the patient to see his record, therefore, the physician usually will not grant permission, but he will give the patient such information as will not be detrimental to him.

It is generally customary among hospitals to permit attorneys to review a patient's record if he has a written authorization to do so. You must always remember to do your part in maintaining good public relations between the hospital, the patient, and his attorney.

Remember, while medical records as an order of business are the property of the hospital, they are kept for the benefit of the patient, the doctor, and the hospital.

Confidential Communications

A confidential communication is one which contains certain private information given by a patient to his physician.

Insofar as the character of the medical record as a confidential communication is concerned, the record may have the same relative standing as the oral statements of the physician or nurse; hence, unless the patient waived the claim of the privilege of the medical record, by a written authorization for release of information, it can be brought into court only upon subpoena or by a court order.

A patient may waive his claim of privilege by introducing his hospital record in evidence. In such an instance, the question of privilege does not arise because the patient himself waived his claim of privilege.

Types of Cases Using Evidence from Medical Records

1. Insurance Cases
2. Workmen's Compensation Cases
3. Personal Injury Suits
4. Malpractice Suits
5. Will Cases
6. Criminal Cases

(Each type will be discussed individually.)

The medical records of a hospital also have been used as evidence tending to prove the mental condition of either a prosecuting witness or of a defendant himself.

The chief value of medical records as evidence is that they contain unbiased statements inasmuch as the doctors, interns, nurses, and others concerned in making the medical record at the time of the patient's hospitalization had no interest in any subsequent litigation.

The Medical Record in Court

For the protection of the hospital and its personnel, the physician and the patient, the medical record clerk, as a representative of the hospital, is not obliged to present the record in court or before any commission except upon a court order or a subpoena.

Subpoenas are usually of two kinds:

1. Subpoena--A process to cause a witness to appear and give testimony.
2. Subpoena duces tecum--A subpoena which, in addition to requiring the attendance of a witness to testify, requires him to bring and produce to the court books, documents, papers, or records described in the subpoena.

The subpoena usually served on a hospital is a subpoena duces tecum. These subpoenas may come from the federal, state, county, municipal, or probate courts. Failure to comply with the subpoena without good reason makes one liable for contempt of court.

Federal courts have the power of subpoena in any state or territory of the United States; state courts have this power only in their counties; while municipal court subpoenas are valid only within their limited jurisdiction.

Hospital records may be considered competent evidence and allowed to be entered as an exhibit on the grounds that reliance can be placed on the written memoranda made in the regular course of business of an institution and that there would be no reason for making false entries at that time. For this reason, it is very important that someone properly qualified to identify the entries as having been made in the regular course of business of the hospital should answer the subpoena. The medical record clerk is usually considered best qualified for this responsibility.

Acceptance of a Subpoena

The following items should be given attention when accepting a subpoena:

1. A subpoena duces tecum should be delivered by a server at least 24 to 48 hours in advance so that all papers may be collected. If given a duplicate subpoena, check with the original which the server should have with him for validity. While the server is still present, check for the name and phone number of the attorney responsible for the subpoena and the docket number of the case.

2. Check immediately to verify that the person or persons have been hospitalized, or admitted to the emergency or outpatient department.

3. Check with the court calendar to see if the case is scheduled for trial at the appointed time, and then phone the attorney requesting him to notify you within the time required to reach the court. One hour will usually suffice. This will save unnecessary time waiting to be called, or possibly even an unnecessary trip if the case is settled or dismissed.

4. If the medical record is on microfilm, notify the subpoenaing attorney at once. He may decide he does not need the record. If he wishes it, it is his responsibility to either provide a reader, or request that photographic prints be made at his expense. Do not under any circumstances leave the film anywhere, even in court, since it contains confidential information on many other patients.

5. Record subpoena in a record book, on a card file, or it is permissible to file it on the left-hand side of the folder containing the patient's medical record.

6. Collect material requested in subpoena--medical record or records, X-ray films, etc. All extraneous material such as letters, social service reports, or anything that is not considered a part of the medical record should be withdrawn.

7. It is a courtesy to notify the attending physician that a subpoena has been received on his patient and give him the date and time it is to be in court.

Conduct As a Witness

Before going to court, it would be best for you to familiarize yourself with the following counsel given in Legal Medicine and Toxicology, Vol. I, by Peterson, Haines, and Webster:

1. If a subpoena is served upon you, you must obey it.

2. Before going on the witness stand, make yourself thoroughly familiar with all the facts upon which you are to testify.

3. On the witness stand, let your bearings be grave and dignified and avoid any flippancy of manner.

4. In testifying, use plain and simple language, avoiding technical medical and scientific terms wherever possible.

5. Remember that your answers to questions are taken down, recorded, and often printed, and that the evidence that you give this day may be reinvestigated at a subsequent trial, and your answers brought before you in some other issue, so that you should clearly understand each question put to you and answer it deliberately, carefully, and coherently.

6. Answer directly and simply the questions which are asked, volunteering nothing beyond which is required to place the facts or opinions requested clearly before the court.

7. It is sometimes difficult for a witness to avoid the unconscious bias which makes him involuntarily hesitant to answer directly a question when he sees it may do harm to the side that has called him; but, you are there "to tell the truth, the whole truth, and nothing but the truth" whether it is good or bad for one party or the other. Your straight, unbiased answer to every question of the examiner and cross-examiner will do much to impress the jury with the sincerity and value of your statements.

8. The cross-examiner may attempt to irritate you by his manner or by the character of his questions. It is almost needless to say that when he does this, he considers it a part of his duty to his client. Be careful, clear, honest, and take no offense.

9. If asked a question, the answer to which you do not feel certain, do not hesitate to say so. It is the wisest witness that knows when to say, "I do not know."

Photocopying

When you are called to the stand, after being sworn in, and you have answered certain questions for the introduction of the record in evidence, the attorney will usually ask for the record. After the record is asked for, normally you will be dismissed from the stand, but may remain in court until the record is released to you.

It is a good practice to photocopy a record and take it with you to court along with the original record. Many judges will accept the photocopy in lieu of the original record after it has been properly identified. This relieves you from remaining in court throughout the entire proceedings.

Before taking the medical record from the hospital to court, each page should be numbered in ink, the total number of pages recorded on the folder, and a record of this total left at the hospital. It is also good policy to have an itemized list of sheets contained in the medical record made in duplicate, the original kept with the record and the duplicate left at the hospital.

Legal Acceptance of Microfilmed Records

In 1939, a United States Supreme Court ruling declared that microfilmed medical records were admissible as primary evidence. This statute legalizes the use of microfilmed medical records as primary evidence throughout the United States in federal courts regardless of whether or not an individual state has laws specifying the admissibility of medical records.

When a subpoena duces tecum has been received and the record subpoenaed is microfilmed, the medical record clerk can cooperate with the attorney by notifying him that the record is on film. It is the responsibility of the attorney who had the subpoena issued to provide the means for reading the film because the hospital has complied with the order of the court by producing the record.

Release of Information

One of the most time consuming problems encountered in the medical record department is the release of information. The majority of requests come from third party payment plans such as Blue Cross, commercial insurance companies, and attorneys. Patients and their relations, members of the medical staff, other physicians, and hospitals, and other agencies also request information.

While the risk of liability is important, it should not be the major factor considered when developing policies governing release of information. Good public relations become equally important. By maintaining good public relations with all inquirers, the medical record clerk can render one of her most important and valuable services to her hospital.

A patient may waive his claim of privilege by giving written authorization for the inspection of his hospital record before information is released. Upon receipt of this dated and signed authorization the medical record clerk may release the requested information. The consent form then becomes a part of the medical record along with a carbon copy of the information released.

In the case of minors or other legally incompetent persons, the authorization may be signed by the parent, guardian, or legal representative. When the patient dies, the administrator or executor of the estate usually has the right to waive the privilege.

No authorization is necessary to disclose nonprivileged information, i.e., facts not related to medical treatment such as dates of admission, address, etc., to persons or agencies which have a legitimate interest in the information.

Policies for Release of Information

Four recommended methods of releasing information in the order of their desirability are:

1. Standard reporting form.
2. A brief summary or discharge summary, or extracts of pertinent parts of a record.
3. In some cases, a complete summary.
4. In rare cases, a complete record.

To Governmental and Other Agencies

Unless the law specifically gives governmental agencies the right to request such information, they are not entitled to receive it without the written authorization of the patient, as is the case with private agencies.

To Third Party Payers

To Other Physicians and Health Agencies

Hospital Lien Laws

A lien law gives a hospital the right to file its claim for the payment of services which it has rendered to an injured person.

Correction of Original Data

In the State of Colorado, a person may change the name on a birth certificate up to the age of one year of the newborn.

Validity of Signatures

Authorization for Surgery

Authorization for Autopsy

Coroner's or Medical Examiner's Cases

Authorization of Emancipated Minors

In the State of Colorado, there is no such classification as an "emancipated minor."

Incident Report

Summary

The medical record as an order of business is the property of the hospital, while the personal data contained in the record are considered as a confidential communication in which the patient has a property interest. It is compiled, preserved, and protected from unauthorized inspection for the benefit of the patient, hospital, and physician as required by law.

When releasing any information, the medical record clerk must ascertain whether the record is to be used as an impersonal document or a personal document. An authorization for release of information should be honored only for the period of hospitalization covered by the dates on the authorization and should be presented to the hospital at least within a year from the time of execution.

Since the medical record itself must frequently be used as evidence in court, it can serve as a protection to the hospital, physician, and patient only when it clearly shows the treatment given the patient, by whom given, and when given.

The medical record clerk who wishes to serve her hospital, the patient, and the community properly should be familiar with the laws governing medical records in general. In addition, she must know the policies of her hospital regarding the release of information, whether it be in answer to a subpoena, in response to requests from governmental agencies, from the patient, from relatives of patients, or others.

MEDICAL RECORDS AND THE LAW

I. Definitions.

A. Law.

1. Law is divided into three areas.

   a. Crimes.
   b. Contracts.
   c. Torts.

2. Hospital Law.

   a. Hospitals.
   b. Clinics.
   c. Other medical institutions.
   d. Divisions of hospital law.

      (1) Contracts.

         (a) Patient care.
         (b) Education.

      (2) Rules and regulations.

      (3) Statutes.

         (a) Crimes.
         (b) Quasi-Criminal.

      (4) Torts.

3. Law which affects hospitals has been changing. The legal aspects of the operation of a hospital increasingly occupy the time of the hospital administrator and members of the governing board.

4. Changes in the law as it affects hospitals have been brought about by two things:

   a. Changes in hospital from:

      (1) Custodial institution-1800 to 1915.
      (2) Doctors' workshop-1915 to 1945.
      (3) Community health center, i.e., institutionalization of health care.

      Changes are reflection of way community views the hospital.

b. Changes in legal system:

(1) Suits against hospitals have increased as personal injury litigation in other fields has increased.

(2) Increased interest in all areas of society and specifically in health organizations has resulted in regulation of hospitals by both federal and state agencies and the institution of federal and state health care plans.

B. Medical Records.

1. The medical record is a complete record of history and treatment of patient as a result of hospitalization.

2. Medical records are instruments to be used in providing:

a. Best care possible for patient.
b. Medium of education for medical staff and para-medical personnel.
c. Basis for comparative study and research for legal protection for all concerned.

3. Primary purpose of medical record department and medical records system is to provide services in support of good patient care. All else is secondary.

II. General Comments.

A. Medical records are the primary tool for evaluating the quality of care given a patient to effect its purpose. It is necessary to produce quality records. Medical record librarian may assist in developing policies for production and quality of records but must leave carrying out such policies to medical and administrative staff so that good working relations will be preserved between the MRL and the medical staff.

B. Medical record personnel responsibilities end with reporting deficiencies in and violations of policies and standards adopted by medical staff and approved by governing board.

C. Medical Record Committee is to assure good quality of medical records. MRL sits on committee in advisory and technical capacity, so must be aware of what is going on in hospital field.

D. Principal duties of medical record personnel--basic functions inherent in organizing and managing a medical records system and providing efficient medical records service, i.e.:

  1. Development and analysis and technical evaluation of clinical records.
  2. Preservation of records.
  3. Development of secondary records (indices of various types).
  4. Development of statistics.
  5. Assistance to the medical staff.
  6. Safeguarding information in medical records.
  7. Supervision of the medical records department.

E. Quality of the medical record will depend largely upon medical record librarian's ability to develop medical record consciousness on the part of the entire medical staff, ability to produce information, and willingness to encourage medical staff members and others to utilize this information.

F. Final evaluation of medical records system will be dependent upon the utilization of the recorded material. This means that medical information on each patient will be available:

  1. For the benefit of patient in case of future illness.
  2. As an aid in clinical and statistical research.
  3. As an administrative tool for planning and evaluating the hospital's program.
  4. In legal and quasi-legal proceedings.
  5. For verification of information for third party payers.

III. Areas of Law to Be Considered.

A. General--where are we?

  1. Review of matters covered in first part of lesson.
    a. Medical records--problems of finding out what the law is on a specific question.
    b. Property right--who owns medical records.

c. Confidential communication.
d. Types of cases using evidence from medical records.
e. Subpoenas.
f. Conduct as witness.
g. Microfilmed records.
h. Release of information from medical records.
i. Hospital lien laws--generally.
j. Correction of data in records.
k. Authorizations (consent and general).
l. Incident report.

2. Content and purpose of medical record.

    a. Complete assembled records should consist of:

        (1) Admission and discharge record.
        (2) History and physical exams.
        (3) Lab and X-ray reports.
        (4) Authorizations--consent.
        (5) Anesthesia record.
        (6) Report of operation.
        (7) Report of tissue exam.
        (8) Physical orders.
        (9) Progress notes.
        (10) Nursing records.
        (11) Paramedical records.
        (12) Consultations.

    b. The purpose of medical records is to aid patient care, not to provide a record for the use of a court of law.

B. Licensing and Accreditations.

1. General requirements for medical records are found in hospital licensing rules and regulations.

2. State law.

    a. Specific
    b. General or broad
    c. Those saying simply adequate, accurate, or complete
    d. Colorado law

3. Other "laws."

    Should any litigation concerning the completeness and accuracy of the medical records occur, failure to satisfy regulatory requirements could well be used as evidence to show negligence on part of the hospital.

C. Contracts.

1. Patient care.

2. Future illness of patient.

3. Education.

D. Crimes.

1. Abortion-Colorado Law of 1967.

a. Need for complete medical record.
b. Need for knowledge of law.

E. Tort.

1. Darling vs. Charleston Community Memorial Hospital, Illinois.

a. Consultation.
b. Careful records.

2. If a complaint is brought, hospital may have to show the concurrence of two or more physicians in the management of the case.

3. General application of case is good reason for complete medical records.

4. Medical record librarian has responsibility to review medical records. A medical record review is:

a. Quantitative--Medical Record Personnel.
b. Qualitative--Medical Staff.

Medical record personnel should be careful in requiring completion of records or completing records not to reflect on quality of care. Records should be reviewed daily of discharged and deceased patients.

F. Release of information.

1. In talking about tort law, it logically follows to talk about release of information from medical records.

2. Property rights in records.

a. Ownership-hospital.
b. Information-patient.
c. Doctor-no rights.

3. Situations where information may be requested.

   a. Personal injury suits by patient.

      (1) Patient's attorney.
      (2) Defendant's attorney.

   b. Malpractice cases.

      (1) Doctors.
      (2) Nurses.
      (3) Other medical personnel.
      (4) Doctor's attorney.
      (5) Plaintiff's attorney.

   c. Industrial commission or other state agency cases.

4. Education.

5. Government agencies.

   a. Veteran's Administration.
   b. Police.
   c. Military.

6. Vital statistics.

7. Third party payers.

   a. B.C.
   b. State Compensation.

8. General Comments.

   a. Release of information is a constant source of irritation in the hospital.

   b. General rule:

      (1) Release required from patient before release.

      (2) Policy, release required from doctor.

      It is not well founded that severe risk of liability await least slip on above rule and policy.

      (3) Reluctance to release without consent--this creates ill will.

9. Liability side.

a. Libel and slander--defamation of character.

  (1) Consent not much help since patient generally does not know what is in his medical record.

  (2) Defense.

    (a) Release to interested parties.

  (3) Danger of libel and slander not significant.

    (a) Infrequent.
    (b) Privilege in most cases.
    (c) Liability exists prior to disclosure--consent can not help.

b. Right of privacy.

Suppression of information even if truthful. This law developed over prostitute, socialite, metamorphosis guard history.

  (1) Pictures more dangerous than written information. (Picture worth a thousand words applicable here.)

  (2) Starving glutton case--TIME magazine award--$1500.00.

  (3) Right of privacy limited by same doctrine as is libel and slander, i.e., privilege between interested persons.

c. Comments--Privileged Communication.

10. Formulate rules in release areas.

a. Education.

Release of information to other doctors or doctor groups, government institutions, and so forth, for educational purposes OK without consent of patient or doctor. If possible, keep name of patient out.

b. Third party payer cases.

  (1) Request by insurance carriers.

  (2) Patient's consent should be secured at time of admission.

    (a) Risk small without consent of patient.

(b) Physician's consent not required, but should be gotten as a matter of hospital staff relations.

(c) Medical record librarian should work with medical staff so their views are given careful consideration and they understand why hospital feels they need not be consulted for permission.

Admissions form in hospital should contain such consent as:

"the hospital may disclose all or any part of the patient's record to any person or corporation which is or may be liable under a contract to the hospital or to the patient, or to a family member or employer of the patient for all or a part of the hospital's charges including but not limited to hospital or medical service companies, insurance companies, Workmen's Compensation carriers, welfare funds, or the patient's employer."

c. Government agencies.

(1) Don't put government agency release in admittance form as patient will think some sort of official spying or snooping is going on. Patient consent not required. Risk slight.

(2) Physician's consent not required here--get medical staff approval.

Example: Police, Veteran's Administration, military authorities where patient is service man.

d. Legal and quasi-legal procedure.

(1) Attorney's request.

(2) Personal injury cases. Get consent of both patient and attending physician.

(3) Malpractice cases. Give without consent of patient.

e. Release to news media.

Because of the exposure news media receives, be cautious in what information is released.

(1) Births.
(2) Deaths, if next of kin notified prior.

f. Vital statistics.

No consent necessary--patient's name usually not included.

g. Caveat.

Where records show mental disorder, venereal disease, illegitimate birth, and like, require separate consent for instruction of record. Such record should be kept in a ~~separate file~~ or tagged in such a way that it puts the record librarian and the personnel staff on notice that consent is required in all of the above release situations.

11. Evaluation.

a. Where risks lie.

b. Who needs protection.

G. Retention of records.

1. For medical purposes.

a. Patient.

b. Education.

When medical administrative needs are over, medical records may be disposed of unless:

(1) Law prohibits.
(2) Permission of regulatory agency required.

2. Legal reasons.

a. Statute of limitations.

(1) General--six years up to 25 years.
(2) Infant--after age 21 before statute begins to run short after majority.

b. AMA says keep 25 years.

c. 10 years if not minor or clinical case.

d. Keep record of records destroyed--name, date of admission, discharge, physician, operations.

3. Summary.

a. What law requires on retention to be known, then develop policy based on:

(1) Need.
(2) Space available.

b. Check microfilming--Colorado allows original to be discarded if microfilm kept. Microfilm admissible in court without original being available.

H. Consent-authorization.

1. General admission, medical exam, etc.

2. Surgical, medical tests.

3. Autopsy.

4. Who must sign for:

a. Minors.

b. Emancipated minors.

c. Legally incompetent person.

d. Husband and wife divorced.

5. Must be informed.

I. Subpoenas.

1. Who has power.

2. Requirements.

a. Industrial Commission hearings.

b. Personal injury cases.

c. Depositions prior to trial.

J. Hospital Lien Law--Colorado, 1967.

IV. Summary--Conclusions.

- A. Laws looked at.
    - 1. Licensing.
    - 2. Accreditation.
    - 3. Rules and regulations.
    - 4. Release of information.
    - 5. Why good medical records.
        - a. Contract.
        - b. Tort.
        - c. Statute.
        - d. Rules and regulations.
    - 6. Requirement for certain records, i.e., statistics.
    - 7. Consent.

LEGAL ASPECTS OF MEDICAL RECORDS

As you will recall, we talked briefly about the release of information. Let's digress a little--one of the most time-consuming problems encountered in the medical record department is the release of information. The majority of requests come from third party payment plans such as Blue Cross, Commercial Insurance Companies, and attorneys, and, of course, medicare has added to this. Patients and their relations, members of the medical staff, other physicians and hospitals, and other agencies also request information.

Remember, a patient may waive his claim of privilege by giving written authorization for the inspection of his hospital record before information is released.

All information leaving the hospital based on the contents of the medical record should be controlled by a single person or department. In the small hospital this person may be the medical record clerk.

After a medical record is filed, the attending physician has no legal right to determine who shall and who shall not see the record; his permission may be sought as a matter of courtesy.

In cases of controversy let the final decision rest with the administrator. Ordinarily, the administrator can refuse permission to any person, whether authorized by the patient or not, to inspect the record at the hospital. He may be arbitrary if he wishes, until he or the custodian of the record is served with a subpoena duces tecum or order for the production of the record in court, or with some other valid legal process which relieves him of his descretionary authority in the case. In any event, the administrator need not act unless he is required to do so by competent legal action.

If it appears that litigation is intended against the hospital, it is advisable to notify the liability insurance carrier and the hospital's attorney. If a specific physician is involved, he should be informed of the nature of the inquiry, as he may desire to report the matter to his insurance company. Whether to give out information under such circumstances should be left to the hospital's lawyer. When such information is refused, a subpoena or court order may require the hospital to produce the records for inspection. One authorization from an insurance company does not cover all the previous admissions of a patient. Do not give more information than the authorization specifies.

The Joint Commission on Accreditation of Hospitals has no objection to release of information to the FBI agents if they are properly identified.

Authorizations

Now, let's go into some specific authorizations. There is no legal requirement that the authorization of the patient be witnessed either by a notary public or other person. Comparison with the sample signature, which should indicate that the signature is that of the same person, is sufficient. However, the presence of a notary's signature and stamp or seal gives additional assurance that the authorization is bonafide.

Authorization for Surgery

The authorization form should be an informed consent, which means that the signer knows what he is signing, knows what is to be done, and understands the risk involved to the patient. It should include such information as:

1. Name of the hospital in which the operation or procedure is to be performed.
2. Name of the patient on whom the operation or procedure is to be performed.
3. Statement of the nature of the operation or procedure to be performed.
4. Authorization for administration of anesthesia, if necessary.
5. Authorization to perform such additional operations or procedures as are considered necessary or desirable in the judgment of the surgeon or physician.
6. Consent to dispose of tissues or parts removed at operation.
7. Statement that the signer is aware of the contents of the form he is signing.
8. Signature of patient or of person legally authorized to give consent on patient's behalf.
9. Signature of witness.

This form should be as specific in its language as possible.

Where no statute or case fixes the age of majority, the common law rule applies that 21 is the age of majority.

Legal Principles in Cases of Minors

1. Operations on minor children, at least those who have not attained years of discretion, may be lawfully authorized by the parent, or, if there is no parent, by a guardian. Discretion means the ability to decide what is just and proper under the circumstances. The minor has a guardian appointed

by the court to manage his affairs if he has no parents or the parents have been deprived of the child's custody or control by the court.

2. In the states where the parents have equal custody, the consent of one parent is sufficient. Where there has been a legal separation or divorce, consent should be secured from the parent who has custody of the child.

3. Except in an emergency, the authorization of the parent or guardian for an operation on an immature minor must be secured. An immature minor is one who does not have sufficient understanding by reason of intelligence and immaturity to know the significance of the act he is being requested to perform. Maturity for the purpose of giving consent for operation is not entirely dependent on age, but is related to the ability to exercise discretion. One may be a minor and mentally mature.

4. In an emergency, it is good practice to obtain the parent's consent in writing as soon as possible after the services have been rendered.

5. Although mature minors may be legally competent to permit operations on themselves, it is better procedure also to get the approval of the parent.

6. The permission of adult siblings of a minor may be valid under special circumstances, but it is safer to insist on the consent of the parent. Actually, if parents are available siblings of the patient have no authority to give consent.

   If the physician operates in good faith, without proper consent, and the child benefits therefrom, the physician may be liable for nominal damages.

7. Married minors or mature minors earning their own livelihood and retaining their earnings are emancipated; their own consent to surgical procedures is sufficient. The term emancipated, as used with reference to the parent-child relationship, involves an entire surrender of the right to the care, custody, and earnings of such child as well as a renunciation of parental duties. The emancipation may be expressed, as by voluntary agreement of parent and child, or implied from such acts and conduct as import independence.

8. If parents refuse to agree to an operation on a minor, even where death may ensue without medical attention, they are within their rights until a guardian has been appointed by the court to replace them and to give authorization or a court of competent jurisdiction has ordered the treatment.

Consent Is Implied in Emergencies

A surgeon confronted with an emergency which endangers the life of the child is under a duty to do that which the occasion demands, within the usual and customary practice among surgeons in the same or similar localities, without consent of the patient or his parent. The law implies consent from the circumstances.

Authorization of Emancipated Minors

An emancipated minor may sign his own consent for surgery if he is cognizant of the purpose of the operation. A mentally defective adult or an emancipated minor may not give a valid consent if he does not understand the nature of the authorization or the ensuing operation. Understanding is more important than age.

Consent of Married Minors

Parental control ceases upon the marriage of a minor, whether married with or without the consent of the parents. Since marriage emancipates the female minor, she has the same right to consent to an operation as her emancipated husband if he also is a minor. Her husband's or her parent's consent is not needed to an operation which she has authorized.

Authorization for Sterilization

Hospitals generally divide themselves into three categories regarding sterilization:

1. Those hospitals that do not allow any sterilization per se. This group takes in the hospitals conducted by churches whose canon laws do not permit it.

2. Those hospitals that allow sterilizations for pathological reasons only. The majority of hospitals appear to be in this group.

3. Those hospitals that allow sterilizations for pathological and socioeconomic reasons.

Consultations should be required on all sterilizations.

When sterilizations for any purpose are allowed, certain precautions should be observed by the physicians and the hospital. These are:

1. The physician and hospital, before proceeding with an operation for sterilization for any reason, should obtain from the patient or from parent or guardian, and from the spouse of a married patient, written consent in a form that shows the patient, parent, or guardian, and/or spouse consents, with full knowledge of the purpose of the operation and effects.

A wife in full possession of her faculties may determine for herself whether she shall submit to such an operation. The husband may not withhold necessary medical assistance to his wife by failing to give consent to an operation upon her. Nevertheless, as a matter of good public relations the husband's consent should be sought, for the absence of his authorization may point to a lack of good faith on the part of the wife or physician.

2. The physician clearly understands the hospital's rules and his own responsibilities concerning sterilization operations.

The above is speaking for the sole purpose of sterilization and not when a physician is operating or removing reproductive organs for sound therapeutic reasons; for example, when sterility results from hysterectomy for carcinoma, bilateral oophorectomy because of ovarian tumors, or partial vas resection in prostatic operations. From a legal standpoint, sterilization has been defined as a procedure (surgical or otherwise) undertaken for the purpose of making one incapable of reproduction.

Authorization for Autopsy

Autopsies, necropsies, and postmortem examinations are synonymous terms.

Autopsies are scientific procedures, the purpose of which is to establish with all possible accuracy the cause of death; to determine the nature and cause of the pathological processes involved, and to acquire reliable information concerning the nature and cause of disease. The ultimate objective is to add to the sum total of our knowledge concerning the disease from which the patient suffered and in this way to improve the health of mankind.

Today, the percentage of autopsies is one of the best indices of the standard of medical practice in a hospital. The Joint Commission on Accreditation of Hospitals desires that autopsies be performed on the bodies of at least 20 per cent of the persons dying within the hospital, and the American Medical Association for approval of an intern training program requires an autopsy rate of at least 25 per cent of deaths occurring within the hospital.

For the protection of the hospital and the pathologist no autopsy should be performed with only verbal permission, except in unusual circumstances. One willing to give oral consent sometimes refuses to sign a permit; in such case the person securing the consent should sign a statement as to the circumstances, indicating the name, address, and relationship of the individual giving oral permission. A witness to the verbal authorization should sign the statement.

The administrator or some person in an administrative capacity should review each case, for it is his responsibility and that of his institution to exercise due care to the end that laws and regulations governing the performance of autopsies are observed.

If an autopsy proves unauthorized, both the hospital and the pathologist may be liable for civil damages.

As a rule the consent is attached to the report of autopsy and made a part of the medical record.

Use of Telegraph or Telephone Consent

The use of telegraph or telephone to obtain consent would have certain disadvantages if it became necessary to prove the identity of the sender or to identify the distant voice. If these media for communication were not resorted to, the hospital would lose an appreciable number of autopsies. The risk is a calculated one in the interests of practicality as it is in commercial transactions by telegraph and telephone. Many hospitals realize the objection from a strictly legal standpoint, but feel that the use of standard media of communication in the community would be regarded as the application of "reasonable care" and good faith, sufficient to constitute a valid legal defense against the rare possibility of a lawsuit.

Limitations on Autopsies

The one who has the right to permit an autopsy also has the right to restrict it. A note of such limitation should be made on the necropsy permit and the pathologist notified. However, a consent which authorizes examination to ascertain the cause of death impliedly permits the removal of organs necessary for microscopic examination, provided no tissue is retained. It is important that the consent specifically include a provision permitting the retention of diseased tissue or organs.

Hospital Cases for Coroners or Medical Examiners

It is a criminal offense to conceal from the medical examiner's or coroner's office any case which properly belongs under his jurisdiction. There may be legitimate doubt as to whether a case is properly one to report. In such cases, the medical examiner or coroner, on duty in the area where the hospital is located, should be consulted. A record should be made of the discussion with him, and this should be incorporated in the hospital record for future reference.

Blood Transfusions

In an emergency, should the surgeon in good conscience, in an effort to save the patient's life, risk violation of the patient's prohibition against the use of blood, the patient would have to prove some damage from the transfusion in order to hold the surgeon liable for other than nominal damages.

It is suggested that the following points receive consideration by hospitals in the case of persons whose religious faith prohibits the transfusion of blood. Statement is from the American Hospital Association.

1. If the patient is an adult, a written refusal is recommended to absolve the hospital, the physician, or physicians, and all other assisting personnel from liability, if any, for the failure to administer blood.

2. If the patient is legally too young to make his own decisions, the written refusal of the parents, if available, should be secured. (In certain instances courts have intervened to authorize transfusions to minors in spite of the objections of their parents.)

3. In emergencies, and where release of the parents of minors is not obtainable, it would be expected that blood would be administered when medically indicated unless clear and convincing evidence is at hand that the patient, if conscious, or the parent, if present, would refuse transfusion.

4. Jehovah's Witnesses consider blood derivatives objectionable, but do not object to the use of blood substitutes.

5. Representatives of Jehoavh's Witnesses state, "that a physician who is one of Jehovah's Witnesses may, according to his belief in the Bible, administer blood, if he can conscientiously do so, when required for the patient who has no objections or who does not indicate that he is one of Jehovah's Witnesses, when ordinary use and customary professional practice require it. If he desires to withdraw because conscientious objection to blood transfusion based on religious scruples, and he may professionally do so without serious hazard to the patient, he may turn the case over to another physician."

6. In view of the foregoing paragraph, it is desirable that provision be made within the hospital for the administration of blood to patients who do not object to its use, in the event that medical staff members are unwilling to administer blood because of their religious beliefs.

Who May Pronounce the Patient Dead

Death is said to be the cessation of all vital functions without capability of resuscitation. Only a person licensed to practice medicine is qualified to pronounce a patient dead. A nurse has no such legal authority, nor the right to fill out and file a death certificate; her responsibility ends with noting the time the person apparently ceased to breathe, if she is in attendance at that time, and notifying the attending doctor or a staff member.

The Death Certificate

Inasmuch as the issuing of a burial permit depends upon the presentation of a properly executed death certificate, the complete reporting of deaths is assured except in those cases where a body is disposed of illegally.

The properly filled out death certificate may become valuable to the survivors for insurance and inheritance purposes. As community statistics, much information is derived from the complete and accurate registration of deaths with respect to age, sex, race, location of residence and occurrence, occupation, and other pertinent facts.

When a death certificate is rejected because the certified cause of death is ambiguous or improper, the hospital must assume responsibility for the resulting delay. This inconvenience to the family and the funeral director will certainly result in a deterioration of the hospital's public relations.

Incident Report

An incident report becomes especially valuable in cases of legal action at a later date because it was written at the time of the happening and before persons involved had time to reconstruct the situation.

An incident report should never become a part of a patient's medical record. It should be placed on file in the administrator's office where it will be available to insurance carriers and attorneys.

The incident must be recorded by the physician in his progress notes and by the nurse in the nurse's notes. Responsible parties must sign such notes. Incident reports protect the hospital, physician, and hospital personnel if the patient ever makes a claim.

Incident reports should also be made out if a visitor, or other third party, should slip on the floor, stumble, etc.

Hospitals which send incident reports and other notices to insurance carriers about happenings within their premises must recognize that such documents probably can be subpoenaed or otherwise subjected to examination by a plaintiff in a law suit, if the document is relevant to the litigated issues. Whether the contents can be used as evidence is a matter for court decision.

Social Service Notes

Social service histories and psychiatric histories sometimes contain much information that is extremely confidential. These records may be omitted from the record until it is filed. A note may be placed in the record saying, "The social history is in a locked confidential file. Access to this history may be obtained by eligible personnel by applying to the person designated."

Dietary Records

Dietary records should be correlated with the medical records.

Medications

Any hospital which allows nurse aides to give medications can not be accredited. If a graduate registered nurse says to a nurse aide, "Take this tablet and give it to Mrs. Jones in Room 232 and see that she takes it, and report to me," that would be perfectly acceptable. However, if the nurse aide does this on her own, it would be wrong.

A telephone order by itself is bad enough and should be used sparingly. Drug and clinical orders should be given only to a registered nurse.

Under no condition should all nurses be allowed to give intravenous medications. Only those specially trained and approved for this work should be allowed to do so.

Stop Orders

Drugs, especially dangerous drugs, should be given properly with reasonable medical staff controls. The ordering of drugs for patients in the hospital without placing a definite dosage and time limitation on the drugs has led in some instances to harm and great expense to the patient.

The Joint Commission on Accreditation of Hospitals requests that hospitals establish a ruling controlling this matter. A sample ruling, acceptable by JCAH is as follows:

1. All drugs in the three categories listed below, ordered for patients in the hospital without specific limitation as to dosage and time, shall be called to the attention of the attending physician upon expiration of (72) (96) hours by the nursing staff.

2. The attending physician will reorder the drug, change the order, or cancel it.

3. It is not considered necessary to awaken the physician in the middle of the night if expiration of order occurs, but it should be called to his attention when he next visits the patient the following morning.

The three categories of drugs are:

1. Narcotics.
2. Sedatives, hypnotics, soporfics, and tranquilizers.
3. Antibiotics and cortisone products.

Anticoagulants and ergot, because of their extreme danger and toxicity, should be ordered specifically as to dosage and time, and there should be a medical staff ruling to this effect.

Oral Request for Lab Work

Oral requisitions for laboratory work are not condoned. Requisitions may be made out by the nurse, but there should be an original order for the procedure signed by the physician. This order should be either on the patient's medical record or in the physician's order book.

Removal of Medical Record

Medical records removed from the hospital is a practice that is definitely frowned upon.

If records are removed the following steps are suggested:

1. Obtain a signed, printed release and receipt from physicians acknowledging withdrawal of records. A line for acknowledging receipt of returned charts should be provided.

2. Set a definite time limit on date of return specified--preferably short; under 72 hours is recommended.

3. Set a limit on number of charts removed at any one time; ten or less is recommended.

4. A rule that no chart may be removed if there is a possibility of a lawsuit.

Preservation of Medical Records

The permanent preservation of all records routinely is an economic waste; some records, however, should be kept indefinitely because of their historical, research, or teaching value. Records of adults may be needed within the period of the statute of limitations to collect hospital bills, or to defend the hospital or its personnel against malpractice or negligence claims within the statute.

JCAH has no standards governing the preservation of medical records. The American Hospital Association in 1960 adopted a resolution recommending that medical records should be retained for clinical and scientific purposes for 25 years, but in hospitals with limited clinical and scientific program, retention should be for ten years.

The American College of Radiology recommends that films in the average hospital should be maintained for at least five years, except that apparently negative chest films of adults should be preserved, if practical, for ten years. Films of an unusual nature or of teaching value should be kept indefinitely.

Emergency Room Records

Good emergency room records should be kept in each case and handled in the emergency room or department. Each emergency record, as a very minimum, should have proper identification data, a description of the sickness or injury, and a description of what was done or prescribed, and should be signed by the proper individual who rendered the treatment or prescribed for the patient. This record is often subpoenaed and is frequently a source of criticism and embarrassment to the hospital because of its inadequacy.

These records should be filed properly and kept a reasonable length of time, probably at least as long as the applicable statute of limitations.

Effect of Statutes of Limitations

One of the factors to be considered in connection with the preservation of records is the statute of limitations of the state. In general, it is felt that medical records should be retained in some form for use in litigation or for other legal purposes.

Such records may prove useful also in establishing dates of births, marriages, age for social security purposes, previous illnesses, etc. All these possibilities of inquiry influence hospital personnel in their decisions on record retention policies. The length of time to retain particular types of records may depend on the state statute of limitations. The greatest concern, however, seems to be with records involving malpractice or negligence cases against physicians or hospitals, especially in the case of minors.

Statutes of limitations fix the time within which a lawsuit may be brought. The policy behind the limitation period is to make claimants prosecute their causes of action promptly, a protection for defendants who would otherwise be indefinitely subject to liability. After the time fixed in the statute, the lapse may be pleaded as a defense. The statutory time for bringing actions varies in the states, as does the time for the different types of lawsuits.

One of the variations in determining when the cause of action accrues depends on the interpretations of the statutes by the courts. The courts of the various states have given conflicting answers as to when the cause of action accrues or the statute of limitations begins to run. The date may be when (1) the physician terminated his treatment; (2) the wrongful act was done;

(3) the injurious consequences become known; (4) the patient reasonably should have discovered the injury; (5) the contract between the physician and patient ended; (6) when the "continuous" malpractice ended.

Occasionally, the same facts may give rise to an action for tort (personal injury) and for breach of contract. The statute may bar one action, but not the other.

ETHICS FOR MEDICAL RECORDS PERSONNEL

ETHICS FOR MEDICAL RECORDS PERSONNEL

I. Topic: Ethics.

II. Objectives:

A. To teach the students that in the medical record profession there are standards to follow for proper conduct just as there are in any profession.

B. For the students to be able to differentiate between ethics and etiquette.

C. The students are to learn what the code of ethics are for our profession, not just the fundamental knowledge of ethics in general.

III. Activities or Procedures:

Lecture, explanation, and discussion will be the procedures used. The students will be given questions on ethics for participation purposes and as a class project.

Role playing.

IV. Materials, Resources, and Bibliography:

A. No special equipment will be needed.

B. Students will be given a copy of "The Code of Ethics."

C. Three educational cartoons on "Unethical Practices" will be used.

D. References will be:

Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Physicians' Record Co., Berwyn, 1963.

Sister Mary Rose Agnes, R.R.L., "Ethical Aspects of Medical Records," Medical Record News, December, 1962.

V. Assignment:

No assignment will be given as only one hour is devoted to this lesson.

VI. Summary and Evaluation:

A. Summarization will be made by pointing out the value and significance of our Code of Ethics as practically applied in our daily professional activity.

B. Due to the brevity of this lesson, evaluation and whether or not the objectives have been obtained will rely heavily upon testing and the follow-up instructor visits.

ETHICS

Medical record librarianship has been recognized as a profession by the hospital and educational fields for many years. Its members observe the criteria generally accepted for members of any profession in that they:

1. Render a personal service.
2. Possess a specialized skill.
3. Continually seek to improve themselves and their profession.
4. Observe the minimum standards of competence established for their profession.
5. Follow the standards for proper conduct established for the members of their profession.

In line with the fifth criterion, the medical record profession has its own code of ethics which we will discuss in detail.

Medical record personnel are concerned with the code of ethics governing their own conduct, but because of the close relationship between medical record personnel and the physician, medical record personnel must have a fundamental knowledge of ethics in general and of medical ethics in particular.

You must remember to differentiate between ethics and etiquette.

Ethics as defined by Mr. Webster is "the study of standards of conduct and moral judgment; moral philosophy, or the system or code of morals of a particular profession."

Etiquette as defined by Mr. Webster is "the forms, manners, and ceremonies established by convention as acceptable or required in a profession."

For our own use, let's say ethics is "the science of proper conduct or the differentiation between right and wrong," while etiquette is "the conventional conduct of good breeding and may not necessarily involve the differentiation between right and wrong."

The propriety of the secrecy that attends the medical record is obvious. No patient will give his history without reservation unless he is absolutely convinced of the privacy of his communication.

Laws have been enacted to prevent the misuse of the information contained in medical records.

In 1957, the American Association of Medical Record Librarians adopted a code of ethics which defines the basic principles for the conduct of its members. Because of the trust placed in every person who works in a medical record department, all, whether members or not, should observe this code.

Our code of ethics falls within our moral choice. The code is based on actual experience and not based on pleasant platitudes.

The code was developed by members of our own profession to guide our actions. Ethics are performed early in our profession.

We have a good code and it should be followed quite carefully and we should not deviate from it.

The code can promote the welfare of the entire community. Success in our field is going to depend on fellow professionals and we are to be accepted as a good profession.

We must always be of trust and confidence.

At this time, let me tell you of a seaman who breached the ship's code of ethics while at sea. This caused great concern to him afterwards. In fact, the breach disturbed him so much that he abandoned ship at the next port. The story ended by this particular seaman searching forever to regain his pride. The same could happen to any of us who betrayed the trust and confidence that is bestowed upon us in our daily work.

A review of the underlying principles of ethics pertaining to our profession will therefore help you to understand your obligations.

Let's take the code and discuss each tenet.

(Students will have a copy of the Code of Ethics and all twelve tenets will be discussed and how they are to be interpreted.)

Sister Mary Rose Agnes, RRL, Sacred Heart Hospital, Idaho Falls, Idaho, has the following words posted in her department:

> "What you see here
> What you say here
> What you hear here. . .
> Let it stay here
> When you leave here."

Sister Mary Rose Agnes states, "These timely words meet the eye of every person who visits my department and they serve as a gentle reminder that we are custodians of confidential information." These effective words come from our Code of Ethics.

In summary, if we understand the need for safeguarding the confidential nature of medical records, we will be in a position to explain our responsibility. In this way, the precautionary measures we use will not be considered indicative of an uncooperative spirit but rather a fulfillment of our professional responsibility.

AMERICAN ASSOCIATION OF MEDICAL RECORD LIBRARIANS

Code of Ethics

FOR THE PRACTICE OF MEDICAL RECORD SCIENCE

Medical Record Science is concerned with the development, use, and maintenance of medical and health records for medical care and treatment, administrative, reference, professional education and research purposes. Medical record practice is a trust delegated by the medical and health services. To protect and merit the trust placed in it, the medical record profession has the responsibility of defining basic principles governing the professional conduct of its members. The American Association of Medical Record Librarians has therefore adopted this Code of Ethics.

The following code of ethical conduct defines the tenets necessary for carrying out the purposes of the medical record profession, is binding upon any member of the American Association of Medical Record Librarians, and upon any person, certified, registered, or accredited by this Association. As a member of one of the paramedical professions, he shall:

1. Place service before material gain, the honor of the profession before personal advantage, the health and welfare of patients above all personal and financial interests, and conduct himself in the practice of this profession so as to bring honor to himself, his associates, and to the medical record profession.
2. Preserve and protect the medical records in his custody and hold inviolate the privileged contents of the records and any other information of a confidential nature obtained in his official capacity, taking due account of applicable statutes and of regulations and policies of his employer.
3. Serve his employer loyally, honorably discharging the duties and responsibilities entrusted to him, and give due consideration to the nature of these responsibilities in giving his employer notice of intent to resign his position.
4. Refuse to participate in or conceal unethical practices or procedures.
5. Report to the proper authorities but disclose to no one else any evidence of conduct or practice revealed in the medical records in his custody that indicates possible violation of established rules and regulations of the employer or of professional practice.
6. Preserve the confidential nature of professional determinations made by the staff committees which he serves.
7. Accept only those fees that are customary and lawful in the area for services rendered in his official capacity.
8. Avoid encroachment on the professional responsibilities of the medical and other para-medical professions, and under no circumstances assume or give the appearance of assuming the right to make determinations in professional areas outside the scope of his assigned responsibilities.
9. **Strive to advance the knowledge and practice of medical record science, including continued self-improvement, in order to contribute to the best possible medical care.**
10. **Participate appropriately in developing and strengthening professional manpower and in representing the profession to the public.**
11. **Discharge honorably the responsibilities of any Association post to which appointed or elected, and preserve the confidentiality of any privileged information made known to him in his official capacity.**
12. **State truthfully and accurately his credentials, professional education, and experience in any official transaction with the American Association of Medical Record Librarians and with any employer or prospective employer.**

1928

Approved October 7, 1957

MEDICARE, STATE, AND JOINT COMMISSION STANDARDS

MEDICARE, STATE, AND JOINT COMMISSION STANDARDS

I. Topic: Medicare Certification, Colorado State Licensure, and Joint Commission on Hospital Accreditation STANDARDS FOR HOSPITALS.

II. Objectives: 1. To introduce to the student some basic concepts about the various licensure, accreditation and certification organizations involved in surveys of hospitals and other health establishments.

2. To acquaint the student with pertinent standards and requirements of each of the inspecting bodies and agencies with general and specific application to medical records in hospitals.

3. To develop with the student a better understanding of the requirements and standards and to assist in interpretation of the standards.

4. To have the student become familiar with reference materials and publications containing standards and requirements as set forth by licensing, accrediting, and certifying bodies which apply to hospitals and hospital medical records.

III. Activities and Procedures:

This subject will be presented to the students in five parts. The presentations are:

A. Medicare Certification and State Licensure: State of Colorado: Lecture covering an overview of survey processes for licensing and certification purposes conducted by Colorado Department of Health.

B. Utilization Review and the Physician's Responsibility for Good Medical Records: Lecture on involvement of hospital medical staff as a requirement for medicare certification.

C. Medical Record Standards, Medicare Certification, and State Licensure of Hospitals: Presentation will consist of lecture, interpretation, and discussion (to include questions and answers) on pertinent standards, regulations and requirements.

D. Joint Commission Accreditation of Hospitals--Survey of Medical Records: Lecture will include minimum standards applied during survey of medical records for purposes of accreditation.

E. Interaction Panel: Lecturers on program for entire day to serve as panel members. Discussion, question and answer session held in a joint meeting of students and hospital administrators. Resource persons representing U. S. Public Health Service--Division of Medical Care Administration, Social Security--Bureau of Health Insurance, Blue Cross (as fiscal intermediary for Medicare benefits) and Colorado Department of Health will constitute supporting panel.

IV. Reference Books, Resource People, Texts:

A. Arndal, Otto, "Joint Commission on Accreditation of Hospitals," National Center for Audio Tapes, University of Colorado, Boulder.

B. Conditions of Participation for Hospitals (HIR 10, 6/67) U. S. Department of Health, Education, and Welfare, Social Security Administration, Baltimore, 1967.

C. Basic Publications of the Joint Commission on Accreditation of Hospitals (June, 1968 Revision) Joint Commission on Accreditation of Hospitals, 645 N. Michigan Ave., Chicago, 1968.

D. Hospital Accreditation References (1964 Revision) American Hospital Association, Chicago, 1965.

E. Standards for Hospitals and Health Facilities, Colorado State Department of Public Health, Hospital Services Section, Denver, May, 1965.

F. Samples of forms used in Utilization Review and Transfer of Information.

G. Resource people and participants: Medical Consultant (Dr. John Zarit) for HIB Program, Social Security Regional Office Representative, Division of Medical Care Administration Regional Office.

V. Assignments: None.

CERTIFICATION AND STATE LICENSURE

The Colorado Department of Health presently consists of seven divisions responsible for all phases of health care from prevention through treatment, care, and rehabilitation. Included in the seven divisions is the Hospital and Nursing Home Division of which Mr. Clarence Horton is the Chief. This division consists of two sections: The Construction Section and The Licensure and Evaluation Section.

It is the Licensure and Evaluation Section that you come in contact with in your jobs as Medical Record Clerks in small rural hospitals in Colorado.

Duties and responsibilities of the Licensure and Evaluation Section are:

1. Licensing annually of all hospitals, sanatoria, homes for the aged and infirm, nursing homes, convalescent homes, maternity homes, and other institutions of a like nature.

2. Evaluation and Certification.

   Evaluation for Certification of hospitals and nursing homes as providers of health insurance benefits under Title XVIII, better known as Medicare.

   Responsible for processing and approving certifications of home health agencies and independent laboratories. Actual surveying is done by other branches in the Health Department.

   Responsible for certification of providers of benefits under Title XIX. State Welfare Department is the agency responsible for the implementation of Title XIX.

3. Consultation Services--every individual in the division is available for consultation to any of the facilities for which we have a responsibility for licensing and certification.

4. Training of hospital and nursing home personnel. This program which you are attending is the first of several that are being planned. Perhaps the most significant program in the planning stage is that which will provide nursing home administrators the knowledge necessary to become licensed as required under Title XIX.

The organization and staffing of the Licensure and Evaluation Section are:

1. Consulting staff of 14 people representing most specialties found in the hospital.

   Chief--Master's Degree in Hospital Administration.

Assistant Chief--Master's Degree in Pharmacy and considerable experience as a hospital administrator.

Nursing Consultants--three at present with Master's Degrees. A fourth is being actively recruited.

Sanatarians--three.

Dietitian--one.

Medical Record Librarian--Miss Virginia Lee.

Medical Consultant--Dr. John Zarit.

Secretarial--four secretaries and one file clerk.

2. Other outside personnel.

Division Chief--Mr. Horton surveys as hospital administrator.

Construction Branch personnel do all surveying from the building and physical environment standpoint.

When required, specialists from other divisions in the Health Department assist--such as, the occupational and physical therapist, medical social worker, etc.

Colorado Revised Statutes of 1963 as amended provide the legal basis for the promulgation, adoption, and enforcement of standards for the operation of hospitals, and the licensing of such institutions by the Colorado Department of Health.

Section 66-1-7, Para. 13a states that one of the powers and duties of the Department of Health is "to annually license and to establish and enforce standards for the operation and maintenance of hospitals, sanatoria, homes for the aged and infirm, nursing homes, convalescent homes, maternity homes, community mental health centers, facilities for the mentally retarded, and other institutions of like nature except those wholly owned and operated by any governmental unit or agency; and no such institution shall be operated or maintained without such license." There are two main requirements here: (1) to annually license, and (2) to set and enforce standards.

The facilities covered are quite broad in scope and cover almost every conceivable medical facility known. Conflicts occur frequently, but they are usually worked out to everyone's satisfaction. In some instances, the Federal requirements, especially in the building code area, may be higher than those of the state. In such cases the state abides by the Federal requirement. In other instances in the case of certification of facilities, the first requirement is that the facility be licensed. If certain state standards are higher than the Federal, the facility would have to meet the higher state standards in order to be licensed, which as you know is a prerequisite for certification.

Section 10 of the above article states, "Nothing in this article shall prevent any incorporated city, city and county, town, county, or other political subdivision of the state from imposing and enforcing higher standards than are imposed under this article."

Powers and Duties of the Board of Health: It could be said that the Board of Health is the governing body of the Health Department. The powers and duties of the Board of Health are myriad, but those that apply to our operation are two: Setting of Standards and Revocations. The standards for the operation of health facilities are usually drawn up by Special Advisory Committees on standards which after much refinement are presented to the Board of Health for approval. The Board then schedules a public hearing(s) at which interested persons can express their viewpoints. The Board has the power of approval or rejection. (Nursing home standards are being revised.) The other duty in which you will be interested is that of revokation of license which we will discuss later.

Licensing Procedure.

A. Statutory Requirement.

Section 66-4-1 of the Colorado Revised Statutes of 1963 states that "it shall be unlawful for any person, partnership, association, or corporation to open, conduct, or maintain any hospital, dispensary or other institution for the treatment or care of the sick or infirm without first having obtained a license therefore from the State Department of Health."

B. Preliminary Contact.

Most medical facilities built today utilize government money in some form (either Hill Burton or FHA) and therefore require a "certificate of need." These are issued by our division. In order to get one of these certificates, the State Plan must show a definite need for that type facility in the area in which it is to be built. However, anyone may build any kind of medical facility in Colorado without state approval. (This is being avoided in some states such as New York where a "franchise law" is in effect.) Because of this preliminary contact we can advise the applicant of the procedure to be followed in licensing.

C. Application for License.

At present this is a simple, one-page form which requires such information as:

1. Bed Capacity
2. Name
3. Address
4. Name of Administrator
5. Owner of Premises
6. Owner of Business

If the owner of the business is a corporation, a copy of the Bylaws and Articles of Incorporation must accompany the application.

If the owner of the business is different than the owner of the premises, a Lease Agreement must accompany the application. This is to be much more involved under Title XIX to the extent that anyone owning 10% or more of the stock must be divulged. Just how this will be accomplished is not known at present as the plan for implementing Title XIX in Colorado has not been approved by the Federal Government.

D. Scheduling of Surveys.

Both certification and licensure are done at the same time. Scheduling of these may seem like an insignificant procedure, but it is far from that. In fact it can be very frustrating and a loss of considerable surveyor time can be the result if it is not done properly. A number of factors must be considered such as weather and road conditions, proper cyclical timing, availability of surveyors (vacations, other absences, and duties.) At present there are 95 hospitals in the state, 50 of which are accredited, and 44 are certified. The accredited hospitals are automatically certified if they desire such status. Non-accredited hospitals must be surveyed and approved for certification. If approved they fall into three categories: 7A, 7B, and 7C. Each of these has a survey recycle time. 7A is 24 months, 7B is 18 months, and 7C is 12 months.

In addition to the hospitals, there are 183 Nursing Homes and other medical facilities, 86 of which are certified. These are divided into two categories, 7A and 7B. 7A facilities must be surveyed every year and 7B every nine months. So when we put this all together we have four different cycles to contend with. Add to this the requests we get to license and certify new facilities and to investigate complaints and it all becomes a very confusing situation. To date we have not been able to come up with a real workable solution, but we are trying. So if your facility is not surveyed at the appointed time, it is not because we have overlooked you but rather have not been able to work you in at that appointed time.

E. Composition of Survey Teams.

It has been the policy of the Hospital and Nursing Homes Division to use the so-called team approach to surveying. The reasoning is logical in that a surveyor who is a specialist in his field will survey that portion of the facility with which he is most familiar. For this reason in the surveying of hospitals the team is composed of an administrator, registered professional nurse, dietitian, medical record librarian, registered professional sanitarian, and a construction consultant. At times Dr. Zarit will accompany the team and survey the utilization review and professional staff requirements. As you can see, at times we have a total of six or seven surveyors descending on a hospital at one time. While this provides for a very thorough survey, the numbers involved become almost overwhelming as far as the facility is concerned.

Considerable thought has been given to changing this procedure and cutting the team to three members, namely, the administrator, a nurse, and a sanitarian. The other personnel would be used on a strictly consultation basis. This would also mean that those of us on teams would have to become familiar and proficient in areas other than our specialty.

It has been policy in the past to try to schedule surveys on Tuesday, Wednesday, and Thursday. If considerable travel is involved, it would be done on either Monday or Friday. This does not give the surveyor much time to write reports and to assemble material which is frequently sent to the facility just surveyed. Therefore, we have scheduled a team out one week and in the office the following week. However, because of the work backlog, it has frequently been necessary to schedule teams out several weeks in succession.

F. Processing of Reports.

Basically, we render four different types of reports: (A) A comprehensive Hospital Licensing Report, (B) A comprehensive Nursing Home Licensing Report, (C) A Hospital Certification Survey Report, and (D) An Extended Care Facility Survey Report. I have sample copies of each if any of you would care to see them. Some are quite voluminous, such as the 34-page Nursing Home report.

Each surveyor is responsible for certain portions of the report and we ask each surveyor to have his particular portion turned in within seven working days after the survey. This is very difficult to achieve as frequently it is necessary to await the arrival of certain information from the facility.

When all the information is assembled, a decision is made as to whether the facility is in substantial compliance with licensing standards and the report is so marked. It is then given to the typist to make a final copy which is Xeroxed and copies sent to the local health department (if one exists) and a copy to the facility. If the facility is in compliance with correctable deficiencies, a written program for the correction of such deficiencies is required within 30 days. If a facility is not in compliance, the administrator is requested to attend a conference in our office with our consultants and representatives of the interested health departments present. All the deficiencies are discussed as well as ways of correcting them. Another survey is then scheduled for a future date acceptable to all parties concerned.

G. Issuance of License.

Licenses are required to be issued by the 1st of the calendar year, except for new operations. Because of a personnel shortage and a heavy workload, we are in the process of completing the mailing of licenses now. With a prospective increase in our staff in the next few weeks, we hope to be able to have current licenses in every qualified facility by 1 January, 1969. This will mean that application blanks must be submitted by the facility about 1 November, be processed through the local health department for approval, and reach our office no later than 1 December.

These are tentative arrangements. It is entirely possible that certain requirements, which are still vague, under Title XIX may require a modification of the procedure, but until the State Plan is approved and assuming our office will handle approval of facilities under Title XIX, we can not act at this time.

When we receive the application, it is checked against our records to determine if there has been a change in ownership, administrator, and number of beds requested. If there has been no change, the application is sent to the Department of Revenue and a license is issued.

A check for $10.00 payable to the Treasurer of the State of Colorado must accompany each application unless the facility is operated by a city, county, or the state government.

Upon issue, the license is sent to our office, and we in turn forward it to the applicant.

In the case of an application for a new facility, we request these be made at least 30 days prior to the opening in order to schedule the team survey. As the facility can not receive patients prior to licensing, the survey team must make a determination whether or not everything will be in conformance when patients are accepted.

Usually the administrator is extremely anxious to open the doors to patients and a licensure determination is usually made the same day as the survey is done and the administrator is given a verbal approval or denial. It is customary to make a follow-up visit to the facility at a later date to be sure the standards are being met.

H. Facilities Not Requiring Licensing.

There are certain facilities which are not required to be licensed:

1. Health establishments owned and operated by an agency of the Federal Government.

2. Establishments which provide medical and/or nursing care for fewer than three people not related by blood or marriage to the operator, owner, or others.

3. Establishments which do not provide accommodations for patients for a period of 24 hours or more.

I. Validity of License.

1. General--Each license shall be valid only in the hands of the person or governmental unit to whom it is issued and shall not be subject to sale, assignment, or other transfer, voluntary or involuntary, nor shall a license be valid for any premises other than those for which originally issued. The department shall be notified thirty days in advance and an application for a new license shall be made in case of any of the following changes:

a. Change in ownership or of management.

b. Change in name or locality of health establishment.

c. Increase or decrease of bed capacity.

d. Change in classification.

2. Termination of operation. The department shall be notified at least thirty days before termination of operation. The license shall be immediately returned to the department upon such termination.

J. Inspections and Surveys.

Health establishments shall be subject to inspection and survey at any time by properly authorized and qualified personnel of the Department in conjunction with designated personnel of the local health department where practicable. The administrator or person in charge of the health establishment shall give the department representative all information required by these laws, rules, regulations, and standards.

K. Revocation or Denial of License.

1. Denial of license. We will discuss this first as it is the easier of the two. As mentioned before, a new license has to be obtained under several conditions. Ordinarily there is no reason to do a survey under these conditions; however, we do require assurance there will be no deleterious change in the operation of the facility.

In the case of a new facility, a survey is required, and if the facility does not meet standards, a license will not be issued until compliance is assured. This is the only case of license denial.

A current license can be withheld. This means that at the beginning of the year the current year license can be withheld if during the yearly survey the facility was found not to be in compliance with state standards. Withholding the license does not, however, prevent the facility from operating. It is, however, an initial step in the ultimate revocation procedure.

Licenses may be revoked for the same reasons licenses are withheld. In the past 60 days, we have revoked one license which the owner turned in without much discussion or controversy. Another case is pending a court review at this time.

2. Revocation. What are the mechanics of revocation? It is not an easy process, and it is incumbent on the State and, more specifically, our branch to assemble the information necessary to prosecute the case.

Before going into detail, one point should be made clear. It is not the policy of our office to act in the capacity of an ogre or of a stern disciplinarian. We are, however, charged with the enforcement of standards, standards which will lead to better patient care and ultimately to a quicker recovery. We also feel that we have a responsibility toward the facility to provide consultation and to disseminate the latest information as to correct, good practice in the planning, design, and operation of health establishments. To this end, we hope to increase our consultant capacity to enable the deficient facilities to improve their standards.

If, after a survey of a facility, it is found to be not in substantial compliance, a copy of our report is sent to the administrator along with a letter stating our findings. Under some conditions the administrator is asked to attend a conference in our office at which representatives from the local health department are present. The deficiencies shown in the report are gone over in detail and the administrator is given all the assistance possible to correct the deficiencies in a given period of time. After this period of time has elapsed, another survey is conducted to determine again whether or not the facility is in compliance. If it is in compliance, our problem has evaporated. If it is not in compliance, revocation proceedings are initiated or the facility is recommended for a different classification.

L. Survey Procedure.

Since this is the area of your primary concern, we would like to go into our survey procedure in a little more detail.

The facility is notified at least two weeks in advance of the time of our visit. Upon entering the facility, we usually have a short ten-minute introductory session with the administrator and the director of nurses. The team then splits and goes to their areas of interest. Whenever possible, we like to have someone from the facility accompany the surveyor. This individual should be responsible for the area that that particular surveyor will check. Under such conditions the surveyor is able to give consultation and direction where deficiencies are found. It is much easier and much more practical to do this rather than try to explain how and what to do in a lengthy report. We try to do a thoroughly objective evaluation of the facility.

In the area of medical records, you may be assured that while Virginia Lee is very thorough, she is also very helpful and will assist you in any way possible.

The time required to do a survey depends upon the number of people and the size and configuration of the building. We ordinarily allocate one day to a hospital. This does not always allow a thorough canvas of every nook and cranny, but it does permit sufficient detail to enable us to make a decision. At the conclusion of the survey, an exit interview is held with the administrator and whomever he desires to have in the group. Each surveyor presents comments on his findings, and these are discussed one by one if the administrator so desires. Usually minor details are not gone into but are incorporated into the survey report.

It is our goal to get the complete reports out to the hospitals within 30 days of the date of survey. We have not been able to do this so far, but we are striving to make that goal.

What does the administrator do with the report when he gets it? This of course depends on the administrator. We hope that he would extract the pertinent information pertaining to each department or perhaps break down the report and give it to the various department heads so that they could go over the report in detail and correct the areas where deficiencies may exist. If a procedure of this type is not followed, our survey was of little value other than to get an official record for our files.

Certification

A. General.

As you know, Public Law 89-97 was passed by Congress in 1965, and it established the so-called Medicare Program. It has since been amended many times to enlarge the benefits available under the program. The two facilities that provide health insurance benefits which we will discuss today are hospitals and extended care facilities. The reason the latter is included is that we are sure some of the hospitals represented here today have an ECF either as a part of the hospital or as a nursing home being operated in conjunction with the hospital. There are other facilities covered under Title XVIII such as Home Health Agencies and Physiotherapy clinics, but these have little interest for us.

B. Participants.

In order to participate as a hospital in the health insurance program for the aged, an institution must be a "hospital" within the meaning of section 1861(e) of the Act. This section of the law states a number of specific requirements which must be met by participating hospitals and authorizes the Secretary of Health, Education, and Welfare to prescribe other requirements considered necessary in the interest of health and safety of beneficiaries.

The term hospital means an institution which:

1. Is primarily engaged in providing, by or under the supervision of physician to inpatients:
    a. Diagnostic services and therapeutic services for medical diagnosis, treatment, and care of injured, disabled, or sick persons, or
    b. Rehabilitation services for the rehabilitation of injured, disabled, or sick persons.
2. Maintains clinical records on all patients.
3. Has bylaws in effect with respect to its staff of physicians.
4. Has a requirement that every patient must be under the care of a physician.
5. Provides 24-hour nursing service rendered or supervised by a registered professional nurse, and has a licensed practical nurse and/or a registered professional nurse on duty at all times.
6. Has in effect a hospital utilization review plan which meets the requirements.
7. In the case of an institution in any State where State or applicable local law provides for the licensing of hospitals.
    a. Is licensed pursuant to such law.
    b. Is approved by the agency of such State or locality responsible for licensing hospitals, as meeting the standards established for such licensing.
8. Meets such other requirements as the Secretary finds necessary in the interest of the health and safety of individuals who are furnished services in the institution, except that such other requirements may not be higher than the comparable requirements prescribed for the accreditation of hospitals by the Joint Commission on Accreditation of Hospitals. We would like to point out that if local and state requirements for licensing are higher than those of the J.C.A.H., the local and/or state standard prevails and the facility must meet it to become certified.

Due to the fact that the Conditions of Participation were written around the standards for accreditation, any hospital which is accredited by the Joint Commission is considered eligible for participation by furnishing adequate evidence that it has an effective utilization review plan. Hospitals currently accredited by the American Osteopathic Association are deemed to meet the requirements of the Conditions of Participation except the utilization review plan if their most recent accreditation survey was conducted after March, 1966.

C. Title VI.

One important requirement is that the facility meet the requirements of Title VI of the Civil Rights Act of 1964 which provides that no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, or be denied the benefits of, or be subject to discrimination under any program or activity receiving Federal financial assistance. Each facility requesting admission to a program such as Title XVIII or Title XIX is required to sign a statement to the effect that they will abide by the provisions of Title VI.

D. State Agency.

There is probably some misunderstanding regarding the State's role in certification of facilities under Title XVIII. Under this law the State is required to designate some state office which then becomes a state agency. The state enters into an agreement to provide the services of a state agency in determining whether institutions meet the Conditions of Participation. Pursuant to these agreements, State agencies certify to the Secretary of Health, Education, and Welfare findings as to whether the facilities and services of the hospital substantially meet the conditions. The Secretary on the basis of such certifications from the State Agency determines whether or not an institution is eligible to participate in the health insurance program as a provider of services.

Conditions of Participation.

A. General.

For an institution to be eligible for participation in the program, it must meet the requirements of section 1861(e) and there must be finding of substantial compliance on the part of the institution with all other conditions. These conditions are requirements related to the quality of care and the adequacy of the services and facilities which the institution provides.

B. Number of COP's.

There are 16 COP's that every hospital must meet. In addition there are four special COP's that apply only to psychiatric and TB hospitals. In the case of ECF's there are 18 COP's. While the COP's may cover similar areas in a hospital and ECF such as Nursing, the requirements for each type of certification are different.

C. Standards.

As a basis for a determination as to whether or not there is substantial compliance with the prescribed conditions in the case of any particular hospital, a series of standards, almost all interpreted by explanatory factors are listed under each condition. These standards represent a broad range and variety of activities which hospitals may undertake or be pursuing in order to carry out the functions embodied in the conditions. Reference to these standards will enable the State agency surveying a hospital to document the activities of the hospital, to establish the nature and extent of the hospital's deficiencies, if any, with respect to a particular function, and to assess the hospital's need for improvement, in relation to the prescribed conditions.

D. Discussion of COP's.

(Briefly go over the individual COP's dwelling mainly on Medical Records.)

E. Survey Procedures.

Each member of the team doing a survey has a set of sheets covering the COP's he or she is responsible for. Each standard and factor is examined and a determination made as to whether the facility complies. Explanatory notes are made when necessary. It is important to remember these represent essential functions to be performed by the institution and its staff in order to satisfy the requirements for participation. It will not be unusual for hospitals to differ in the manner in which these functions are performed. Variations in the type and size of hospitals and the nature and scope of services offered will be reflected in the differences in the details of organization, staffing, and facilities. However, the test is whether there is substantial compliance of the conditions. It is therefore important that the surveyor be very objective in the examination of the operations of a facility.

F. Surveyor Rating.

Upon return to the office, each surveyor goes over the survey sheet in detail and then decides if a standard is or is not met and if a condition is or is not met. There are no rules as to how many factors can be "no" to make a standard "not met," and there are no rules as to how many standards should be "not met" to make a COP fall into that status. This is a determination to be made by the surveyor based upon:

1. The degree to which each standard, as well as the total set of standards relating to a COP are met, and

2. When there is a deficiency in meeting a standard:

a. Whether the deficiency is one concerning the statutory requirement which must be met by all hospitals,

b. Whether the deficiency creates a serious hazard to health and safety, and

c. Whether the hospital is making reasonable plans and efforts to correct the deficiency within a reasonable period.

G. Compliance Determination.

As soon as all surveyors have turned in their respective reports, they are assembled for the final typing. Each standard and factor is reviewed and a final determination made as to whether the facility is or is not in substantial compliance with the COP's. This can be a very difficult matter and at times requires much discussion and thought before a final decision is made.

H. Classification of Hospitals.

A copy of the survey report is sent to the Regional SSA office along with a Certification and Transmittal sheet. This sheet gives certain vital information including the rating of the hospital which is either 7A, 7B, or 7C. A 7A hospital is one which is in substantial compliance with the COP's with no significant deficiencies.

A 7B hospital is one which is in substantial compliance with the standards of participation with correctible deficiencies.

A 7C hospital is one which meets the conditions for special certification. (limited access)

This latter classification can be given only where by reason of factors such as isolated location or absence of sufficient facilities in an area, the denial of eligibility of an institution to participate would seriously limit the access of beneficiaries to participating hospitals. We would like to stress that such approvals will be granted only where there are no deficiencies of such character and seriousness as to place health and safety of individuals in jeopardy. This facility is usually found in an isolated location which generally implies a rural community where the provider in question is the sole source of such services. It is up to the state agency to prove to S.S.A. that the denial of certification would be harmful to that area.

The condition of special certification does not exist in the metropolitan areas as here there are plenty of certified facilities, and the denial of certification to a facility would not affect the program.

We probably should also mention the two greatest causes for lack of compliance is the physical plant and nurse staffing.

Emergency Access Hospital.

This is another category and applied to those hospitals that can not comply with the COP's or which are not accepted as providers but which can receive payments under the program for certain emergency services. The key word here is emergency.

Final Processing.

After all the survey information is assembled, it is sent to the Regional S.S.A. office where it is gone over in detail. It is also checked by the Regional DMCA office before being sent on to the central S.S.A. office in Baltimore and central DMCA office in Arlington. It usually takes about 60 days for a decision to be received after the material leaves our office. Again, we would like to point out that our office (the State Agency office) gathers the data and makes a recommendation. We can not approve or disapprove. The final acceptance or rejection comes in the form of a letter from the Regional S.S.A. office.

Conclusion.

After listening attentively to all of the material which has been presented, you may be asking yourself, "How does all this relate to medical records?" For this there is only one answer. The Medical Record Department is one section of the survey report. If it were not considered of importance, it would not have been given the status of a separate section in the report. The presence of deficiencies in this department which may be severe enough to render the entire condition not in compliance may result in a facility being denied certification or at least a lower status had the records been in compliance. Therefore, it is incombent on every one of you to do the best job you know how and to constantly find ways and means of improving your skills and knowledge. Later on, we will tell the administrators that it is up to them to provide you with the facilities, equipment, and resources to enable you to do the best job possible. A well-run records department can be of tremendous assistance to the physician and also to the administrator in alleviating the problem of pressing doctors on records.

Of course, in the final analysis we hope that the maintenance of good medical records will result in an improved patient care which is our ultimate goal.

With your permission, we would like to quote from "Hospital Organization and Management" by Dr. Malcolm T. MacEachern, who was the late Professor of Hospital Administration at Northwestern University. "The medical record department is a comparatively modern development in hospitals, reflecting the need created by changes in modern society, and in the science of medicine. The medical record itself, as a description of patients' illness, the treatment administered, and results achieved, goes back to antiquity, but its use as an essential tool in the hospital for aiding the patient, the physician, and medical research grew out of modern conditions." To illustrate his belief in the importance of medical records, he devotes more pages to this one area than all other with the exception of the medical staff.

UTILIZATION REVIEW AND THE PHYSICIAN'S RESPONSIBILITY FOR GOOD MEDICAL RECORDS

Utilization Review in Colorado predates the U. S. Medicare Utilization Review Program by more than 5 years. Colorado Blue Shield, Colorado Blue Cross, Colorado Hospital Association, and Colorado Medical Society played an important role in Utilization Review. In 1965, the average stay in a hospital was 7.3 days. If that could have been reduced by 1 day, the savings would have been $4,962,000.00. In the Denver metropolitan area, the average hospital stay was 6.7 days for those under 65 years of age and 11.6 days for those over 65.

When the Medicare Program was adopted, the Governor of Colorado designated the Colorado Health Department as the state agency to implement the Medicare Program, Title 18, Part A, and Dr. John Zarit was selected by Dr. Roy L. Cleere, Executive Director of the Colorado Department of Public Health, as the physician-consultant to the Medicare Program to implement the Utilization Review plans and the Utilization Review committees in the hospitals and nursing home facilities.

The medical profession has a basic role in insuring proper and effective utilization of beds and services. The physician decides upon admission, orders diagnostic tests, drugs, treatment, and nursing procedures. These decisions affect the scope of hospital facilities, quality of care, and hospital costs and largely determines the pattern of hospital usage.

The Utilization Committee is established within the medical staff of a hospital or E.C.F. to assure that all of the inpatient services given are necessary and could not be provided as effectively in the home, office, hospital outpatient department, or other more appropriate, available facilities.

The Utilization Review Committee, to satisfy the requirements of H.I.B., must submit through the hospital administration a utilization review plan which must include the following statutory requirements in order to be certified as a participating facility for Medicare.

1. At least one physician of the Utilization Review Committee does not have a financial interest in the facility.

2. The Utilization Review Committee must meet at least monthly.

3. The facility must designate a definite extended duration.

4. A review must be made of each patient within 7 days after the end of it's extended duration.

Utilization Review is a challenge to all concerned with implementing the Medicare legislation. The objectives of better quality medical care and effective use of facilities are fraught with problems.

Under Medicare, the institution would be required to have in effect a Utilization Review Plan which is applicable to services furnished to beneficiaries of the hospital insurance program, including also nursing home--E.C.F.

The committee set up under the plan would be responsible for undertaking two kinds of services:

1. Education--admissions. Services provided, length of stay from standpoint of medical necessity. It is a committee of awareness.

2. Review of individual beneficiaries remaining in institution for a period of extended duration--consult with family physician.

Guiding Principles:

Utilization Review Committee:

1. Over-all objectives--the maintenance of high quality patient care.
2. It is the responsibility of the physician to make decisions regarding hospital admissions, course of treatment, and length of stay.
3. Individual hospital carries full responsibility for effectiveness and efficiency of Utilization Review Committee.

It is the intent of Congress to provide a flexible framework within which hospitals and physicians can develop the most appropriate measure for early individual institutional care.

The objectives of Utilization Review are:

1. Maintaining the continued high quality of medical care.
2. The assurance that the most efficient and effective use is being made of the patient's "Medicare Dollar."
3. The effective utilization of existing medical care facilities.
4. Intelligent reconsideration regarding future anticipated community needs.

Responsibilities of Various Parties:

It is interesting to realize how many areas of concern are involved in the process of Utilization Review. The physician or reviewer or surveyor is, of course, the "hub" around which the whole utilization process is coordinated. The reviewing physician must have an adequate knowledge of review process as well as background material. He must maintain an open mind in order to objectively perform his review functions.

The patient's attending physician becomes intimately involved in a portion of Utilization Review. He will be consulted when there is need of clarification. Regulations state that the judgement of the attending physician in an extended stay case is given great weight and is not rejected except under unusual circumstances.

The patient must not be forgotten. An introductory brochure should be given the patient upon admission.

The administrator plays a most essential role.

The nurse becomes an invaluable asset to the utilization process. She gives information regarding the patient's physical, social, and mental status.

Social worker--likewise.

The fiscal intermediary is given responsibility, not the least of which is assurance that the Utilization Review Process is being carried out in an active and efficient fashion.

Final Group: The secretarial and clerical segment has the responsibility for handling forms, taking minutes, and preparing reports.

Type of Cases to Be Reviewed:

1. Extended duration cases--no physician has review responsibility for any case of continuous extended duration in which he was professionally involved.

2. Random sampling--recommend 5 to 10% of patients to be selected.

3. Certification and recertification.

Lack of adequate written material on patient's chart has proved a major problem for reviewing physician. The medical profession should be urged to maintain more complete and adequate records, particularly in E.C.F. patients.

The physician is the "hub" of the Utilization Review, but practically all those involved in patient care play a role.

Precise definition of and stringent differentiation between convalescent and custodial care are virtually impossible. Ideal Utilization Review Forms remain beyond our reach, but a good form will focus the surveyor's attention on the critical considerations.

Efficient operation and conservation of physician surveyor's time are paramount considerations for a successful program.

Complete and adequate medical charts (records) for patients in each E.C.F. are an absolute necessity.

Maximum cooperation and communication among all those having patient care responsibilities is vital to the effective and efficient operation of Utilization Review in E.C.F. facilities.

Utilization committees devote particular attention to the following areas which generally account for ineffective utilization.

1. Unnecessary admissions.

2. Excessive length of inpatient stay.

3. Delay in use or overuse of X-ray, lab, and other diagnostic and therapeutic services.

4. Delay in consultations and referrals.

The Utilization Review Committee will find answers to such questions as: How many of such cases are there? What factors contribute to these conditions? What practical recommendations can be made to the clinical services, administrators, prepayment plans, and to the community to avoid these situations?

The work of the Utilization Review Committee is largely dependent upon the availability in the hospital of up-to-date charts which contain sufficient information to justify the decisions made by the attending physician in charge of the case and to permit objective review.

Analysis of the Utilization Review Committee may point up inadequacies in the charts not revealed by review from the standpoint of accrediting bodies, legal requirements, or quality control. Recommendations for improvement of medical records, including possible revision of forms, should be referred to the medical record committee for appropriate action.

The Utilization Review Committee will need to maintain the closest liaison with the tissue committee which is responsible for establishing the justification for surgery done in the hospital. The chairman of the tissue committee should have a standing invitation to attend the meetings of the Utilization Review Committee.

Functions of the Utilization Review Committee:

1. Review of charts--a member assigned the responsibility of reviewing "X" charts in advance of each meeting and being prepared to discuss those charts which raise specific questions.

2. Classes of charts to be reviewed:

   a. Long-stay cases. 5% remain more than 30 days. Over 8-day maternity cases may present complex socio-economic problems. Difficulties in transferring persons in need of chronic care.

   b. Short-stay cases. Over 10% are discharged after 1 or 2 days. Usually, diagnostic and minor surgery might have been provided as effectively without admission.

   c. Emergency admissions. Survey patients admitted during previous 24 hours.

Utilization Committee should maintain adequate summary records of it's activities. Records should be kept confidential and available only to the executive committee of medical staff.

The physician's role is to practice medicine--to practice medicine in the patient's best interest. This is why the Utilization Committee has become an increasingly important responsibility of the medical staff.

Once when the cost of hospital care was much lower than it is today, there was little need for the physician to be the watch dog of the health care dollar. But all this has changed. Today the economics of medical care are more loudly discussed than the quality of medical care.

To accomplish these objectives:

1. Reduce waiting list.

2. Keep from building beds that are not needed.

3. Assure wise use of hospital facilities.

4. Conserve community health funds so that they will be available to pay for care of others.

5. Even reduce the cost of today's health care.

Utilization Committee Effectiveness:

1. Increase awareness of the problem of unnecessary utilization.

2. Stimulate discharge or transfer to appropriate facilities of long-stay cases.

3. Discourage unnecessary admissions.
4. Free beds and improve bed turnover.
5. Improve the quality of hospital charting.
6. Eliminate questionable emergencies.
7. Provide better understanding of third-party problems.
8. Develop more equitable and efficient admission and discharge procedures.
9. Increase cooperation with respect to the discharge hour.
10. Focus need to avoid delay in completing consultation.
11. Stimulate work in newly discovered problems involving various hospital procedures such as week end laboratory coverage, operating room schedules, and delays in tissue reports.
12. Improve liaison between medical staff and administrators.
13. Bring realization of the good record of the medical staff and stimulate them to do even better.
14. Possibly eliminate the need for the building of additional hospitals or additional wings of beds.
15. Reduce hospital costs.
16. Improve quality of patient care.
17. The public in general is now gathering the impression that the doctors are attempting to do something about hospital costs.

There must be some pitfalls.

1. Involves too much of physician's time and there are not enough physicians to do the job, particularly in small hospitals. Combine the committees.
2. Just another meeting. Staff must realize our objectives.
3. Resentment of committee as a policing body. Educational: Better policed by our peers rather than a government agency.
4. Failure to act according to their convictions for fear of antagonizing their colleagues.
5. Belief that there is a lot of useless work.

6. Difficulties in being able to get enough good men for the committee.

7. Failure to keep accurate records.

Ingredients for Effective Committee:

1. Dedicated physicians.

2. Sympathetic administrator.

3. Educated staff membership.

4. Fair and understanding third party.

5. Fair and unbiased chairman for your Utilization Committee.

6. Feeling by all physicians that they have a mandate to continue to improve health care of Americans through a system that is guided and controlled by physicians.

Utilization Committees are NOT:

1. Are not police bodies with power to ferret out (discover) and censure a few "guilty" physicians.

2. Are not scientific research bodies attempting to measure the precise magnitude of over-utilization and under-utilization.

3. Are not "whitewash" groups.

4. Utilization committees are not the whole answer to the utilization problem.

Ultimate authority and responsibility for the conduct of a hospital lies in the governing body. The governing body appoints administrator, holds administrator accountable for operating the hospital in accordance with established practices. Medical staff recommends appointments which are approved by the governing body. The medical staff is responsible for the quality of medical care rendered to patients in the hospital. They must carry out certain duties, i.e., maintenance of adequate medical records. Staff must evaluate clinical practices, and it is the responsibility of the entire staff to do so.

There are minimal standards which we believe are necessary for maintenance of an acceptable quality of care. Once adopted, then we urge the hospital and staff to surpass the minimal standards.

1. Medical staff is organized for the supervision and control of professional work.

2. Conferences are held for the review and analysis of clinical work at regular internals.

3. Accurate and complete medical records with sufficient data to justify the diagnosis and warrant the treatment.

4. Clinical lab and X-ray facilities essential to the proper pre-operative study of the patient.

5. Elimination of fee splitting. (This was once widespread.) The program of hospital standardization came into being.

To evaluate clinical practice, the following are essential:

1. Reliable medical records, evidence of diagnosis, a history and careful physical examination and scientific interpretation of findings. Sufficient data recorded to justify the physician's treatment. Good medical record is indispensable.

2. Reliable reports of diagnostic tests. Is there supervision in this area? If laboratory work is done outside, make certain they are government or state approved, licensed or under direct supervision of a pathologist.

3. Organized medical staff.

4. Competent medical staff. Judgment to evaluate depends on ability of those doing the evaluation.

Good medical records, reliable diagnostic services, and competent, well-organized staff are essential for good clinical review.

Medical record committee of the medical staff is one of the most important committees. Function:

1. Review of the record as a record.

2. Evaluate patient care for documented evidence on the patient's chart, including medical audit, review, and evaluation, and assessment of patient care.

3. Insure that there is proper filing, indexing, storage, and availability of all patients' records.

4. They should, with the aid of legal counsel, advise and develop policies to guide the medical record librarian, medical staff, and administrator so far as privileged communications and legal release of information are concerned.

5. Advise, work with, and in every way possible assist the medical record librarian in her duties.

Medical records are an important tool in the practice of medicine. They serve as a basis for planning patient care. They provide a measure of communication between the physician and other professional groups contributing to the patient care. They furnish documentary evidence of the course of patient's illness and treatment, and they serve as a basis for review, study, evaluation of the medical care rendered to the patient.

The quality of medical records is considered an important indication of the quality of the patient care given in a hospital.

STANDARDS FOR HOSPITALS

I. Topic: Standards and Requirements for Medical Records: Medicare Certification and State Licensure of Hospitals.

II. Objectives:

A. To have the students acquire some basic knowledge about surveys of hospital medical record departments which are conducted for purposes of qualifying facility for State Licensure and Medicare Certification.

B. To have each student become familiar with documents which should become constant and ready desk-reference materials.

III. Activities and Procedures:

A. Instruction Plan.

1. Time required.

a. Two hours for medicare certification standards.

b. One hour for state licensure standards.

2. Method of Instruction.

a. Lecture.

b. Student participation.

(1). Each student to mark the standards in her own documents under the direction of the instructor.

(2). Instructor-student discourse on interpretations of standards throughout instructor's presentation.

(3). Instructor-student discussion following instructor's presentation to include questions from students relative to subject material.

B. Instructor's Outline on Lesson Content.

1. Lecture.

a. General information.

  (1). Public Law 89-97.

  (2). Providers of Health Insurance Benefits.

b. Surveys--state licensure and medicare certification.

  (1). Team survey.

  (2). Medical record consultant on team.

c. Medical record department survey.

  (1). Method of survey.

  (2). Consultation part of survey.

  (3). Final conference with administrator.

  (4). Reports made following survey.

  (5). Leniency on part of surveyor on first surveys with reason--intent to assist in achieving compliance.

    (a). Personal follow up.

    (b). Training program--frist MRCTP PH 110-232.

d. Training programs in order to attain functional department.

  (1). Need established after first surveys.

  (2). Training programs for hospitals without registered medical record librarians.

    (a). Qualified medical record librarian consultants or group supervisor to be retained by the individual hospitals.

    (b). Introductory training course for small hospital medical record personnel.

(c). Correspondence course for medical record technicians.

e. Survey findings: medical record deficiencies.

2. Instructor-Student Participation.

   a. Introduction to reference documents on standards.

      (1). Medicare Certification: Conditions of Participation-Hospitals.

      (2). Licensure Standards: Standards for Hospitals and Health Facilities.

   b. Instructor to guide students through booklets on standards.

      (1). Definitions:

         (a). "Statutory requirements."

         (b). "Standards."

         (c). "Factors."

         (d). "Shall" and "should" as used in state standards.

      (2). Reference to be made by instructor to pertinent standards, with explanation or interpretation as necessary.

         (a). Students to enter pertinent notes in the documents as well as mark the standards under discussion for future reference.

         (b). Question-answer-discussion between students and instructor during session.

      (3). Short oral review and summarization.

IV. Classroom Materials:

   A. Reference booklets for classroom distribution to students.

1. Conditions of Participation-Hospitals-Regulations: Federal Health Insurance for the Aged, U. S. Department of Health, Education, and Welfare, Social Security Administration HIR-10(6-67).

2. Standards for Hospitals and Health Facilities: Colorado State Department of Public Health, Hospital Services Section, Denver, 1965.

B. Additional material for distribution to students: Photocopy of "Hospital Survey Report-Medical Record Department," page 7, Form SSH-1537 (2-66).

V. Assignments: No assignment outside of classroom activities.

VI. Summary and Evaluation:

A. Oral summarization will be attempted through student discussion of topic immediately following subject presentation in classroom.

B. The general pre- and post-training session evaluations will be used as the medium for testing knowledge gained on this subject.

VII. Bibliography:

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B. Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Physicians' Record Co., 1963.

C. Letourneau, Charles U., M. D., "Medicare and the Record Librarian," Hospital Management, January, February, March, 1968.

D. Porterfield, John D., M. D., "Attaining Medicare and Pursuing Higher Standards," Medical Record News, October, 1966.

E. Conditions of Participation-Extended Care Facilities, U. S. Department of Health, Education, and Welfare, Social Security Administration, HIR-11(2-68).

F. Conditions of Participation-Hospitals-Regulations, U. S. Department of Health, Education, and Welfare, Social Security Administration, HIR-10(6-67).

G. Standards for Hospitals and Health Facilities, Colorado State Department of Public Health, Hospital Services Section, Denver, 1965.

STANDARDS AND REQUIREMENTS FOR MEDICAL RECORDS

Public Law 89-97, legislation enacted by Congress in 1965, better known to us as the Medicare Law, has probably been the greatest contributive factor to the mass movement under way across the nation toward upgrading quality of activities within health institutions. There are very few hospitals which have not been vitally affected as the result of this piece of legislation. The main concern of hospitals has been their eligibility to participate in the Medicare program as providers of health insurance benefits for their communities.

Title XVIII, or the Medicare program, also produced the "Conditions of Participation" as the minimal standards to be met by health institutions to qualify as participants of the program. One can readily understand from the "Conditions of Participation" the reason for medical record services being included in the concerns and efforts of those hospitals attempting to meet necessary requirements.

At the present time, Health Insurance Benefits are limited to the senior citizen needing medical care. Each of the students interested in the program is well aware of hospital involvement, along with all of the trials and tribulations, in the initial experience of rendering assistance to the financial aspects of the program. Each is aware of the financial intermediaries who are also involved in the Medicare program.

What you may not be aware of is that any hospital may become uninvolved in the Medicare program simply by remaining in the classification of "emergency access" for an extended period of time, or by not meeting all conditions of participation beyond a certain period of time.

You have already been instructed on the role of the State agency and the various processes to be undertaken to become participants within the Medicare program.

Surveys by the State agency, Hospital and Nursing Home Division of the Colorado Department of Health, the agency so designated by the Governor of Colorado, are conducted for two purposes:

1. State licensing of facility as a prerequisite to Medicare certification.

2. Determining compliance with Conditions of Participation for Medicare Certification in order to submit a report, with recommendations, to Secretary of Health, Education, and Welfare.

To repeat a statement made earlier, those hospitals accredited by Joint Commission on Accreditation of Hospitals were automatically certified as providers within the program if they so desired; therefore, they were not included in the initial surveys.

The survey method chosen by our state agency is known as the team survey. Mr. William Krause, Acting Chief of the State Agency Division which conducts the surveys, gave comprehensive and detailed account of our survey processes. It has been reported to us that this type of survey has resulted in a quality-type survey.

This instructor has been serving as the medical record consultant on team surveys for this state for nearly two years, and joined the team for the second series of surveys.

Some of the students have been through a survey with the medical record librarian on the team and are, therefore, familiar with the routine applied to evaluation of this area. A brief summary of events that take place during a survey of medical records areas will be presented.

The consultant, after the initial team conference with the hospital administrator, will meet with the employee who has been assigned the responsibility for medical record functions. At this time, the medical record person is briefed on the conduct of the survey to take place as follows:

1. Evaluation of the medical record facility and personnel assigned medical record duties.

2. Evaluation of current patient records at each nursing station.

3. Evaluation of medical records covering the various clinical services which the medical record employee has been requested to pull from the file of recent patient discharges.

Both State Standards and Medicare Standards are applied during the evaluation process.

It has been this surveyor's experience, based on surveys in smaller hospitals, that the greatest portion of time was utilized in giving consultations and explanations of requirements.

On completion of a survey, an exit conference is held with the administrator to relate the general findings. Depending on the circumstances at the end of the survey, this is done either on an individual or a team basis. At times, some team members will have concluded their review before others are ready for conference.

Following a survey, the report to be sent to the Social Security Administration is drafted and finalized as quickly as possible. This sometimes takes a goodly number of hours since many facilities have many areas in which the survey findings must be explained in great detail.

In the medical record area, a lengthy report is especially necessary when leniency has been applied, as might be the case in a facility which was not initially surveyed by a professional medical record librarian and might still be unaware of those deficiencies needing correction. Another example of leniency in recommending certification might be in the case of a facility with no organized medical record department, no space assignment, no assignment of administrative responsibility, and no medical record services being provided. Under these conditions, leniency may be granted on the basis of personal assistance to be given by the medical record librarian consultant.

It has become apparent that too many hospitals need consultative assistance in the medical record area. Since it is not humanly possible for one consultant to aid all of them in a limited period of time, it was decided that a training program would best fulfill this need.

When the need for a training program was recognized after the first surveys by the medical record librarian consultant, the plans for the training program were developed with the primary objective of attaining a functional department so that some of the requirements for Medicare could be met. In other words, the intent was to upgrade small hospitals located in the remote and smaller communities which were without registered medical record librarians to assist in developing the medical record needs for the hospital.

The program was further developed along the following guidelines:

1. That an introductory medical record training course be effected.
2. That the students progress toward obtaining some status through enrollment and completion of the correspondence course given by the American Association of Medical Record Librarians to enable them to become accredited medical record technicians.
3. That the hospital obtain further assistance through a professionally qualified medical record consultant or part-time registered person on a more limited basis.
4. That the first training program be evaluated and used to determine the need or feasibility of an annual up-grading program.

Listed here are some of the deficiencies found in our surveys of medical record areas. This should help the students identify problems in their own departments and be alert for the standard which applies.

Some of the deficiencies found were:

1. Most of the small hospitals did not have an organized medical record department with assigned administrative responsibilities.

2. Medical records were too often considered a business office function where pages of the medical record were stapled or paper-clipped together, sometimes placed in a folder, and filed among business office records. Usually, these files were not secured and were available to all personnel in the area.

3. Confidentiality of the medical record was not maintained; records were removed from the hospital to physicians' offices for indefinite periods of time.

4. Records were often assembled in the order received in the department.

5. Records were filed without being analyzed; therefore, they were lacking or missing important reports, such as physical examination, diagnostic test results, operative findings, etc.

6. Unacceptable or cumbersome methods of filing, no systems or antiquated procedures, were used.

7. Required and necessary indices were not maintained. Patient filling ledgers were used as patient master file.

8. Records on newborn patients were not maintained.

9. Odd storage areas were used for medical records, such as kitchen closets, laundry rooms, hot dry attic reached by steep long ladders, or basement tunnel areas.

The deficiencies which have been mentioned are those that fall into the area of administrative responsibility, for we have purposely avoided those which are the responsibility of the medical staff.

Each student should have two documents which are to be used in the classroom project. Please note that one of these booklets contains the Medicare Standards: Conditions of Participation for Hospitals, a publication by the Health, Education, and Welfare Department, and the other booklet contains State Standards for Hospitals: Standards for Hospitals and Health Facilities, published by the Colorado Department of Health. Both documents will be examined in detail. As she progresses through the standards, each student should make any notes in the booklet with regard to interpretations or explanations which are given and mark each standard as it is examined. These books are being studied here for future reference.

Please note that standards will be reviewed which are not specifically under the heading of medical records sections. However, all standards which come under review will be of importance to all the medical record personnel as they pertain to information which would contribute toward your job within the hospital. To the extent that a medical record person has gained knowledge regarding all aspects of hospital activities and functions does she become a valuable asset in her hospital. Think of the important service each of you can render on returning to the hospital and being able to assist the administrator and the physicians with the knowledge gained with regard to standards.

First, some definitions are needed to clarify the manner in which standards have been written.

1. Statutory requirement: a requirement which MUST be met before a facility may be certified for Medicare. There are eight statutory requirements given in Conditions of Participation for Hospitals.
2. Conditions of participation: each area within the hospital which is surveyed is covered by a stated condition for the specific area. There are sixteen conditions of participation to be met within the hospital as listed in HEW's Conditions of Participation for Hospitals. Specific areas are generally departments, such as dietary, medical records, etc.
3. Standards: a series of requirements which are to be met under each condition (for each department area).
4. Factors: each standard may be comprised of several factors which are explanatory components for each standard.

In State Standards:

Two words are used throughout the various written standards which should be clarified to better understand the written content within the document:

1. "Shall" is used to indicate a requirement.
2. "Should" is used to express recommendation.

Now, let us review the documents which follow:

JOINT COMMISSION ON THE ACCREDITATION OF HOSPITALS

I. What is required of Medical Record Librarians in a visit by the Joint Commission?

   A. Will request that a number of clinical records in such categories as appendectomy, hysterectomy, and tonsillectomy be pulled for inspection.

   B. Will visit with the staff of the Medical Record Department and question them on the organization and operation of the department.

   C. Will hold a conference with the Medical Record Librarian during which a number of types of records will be reviewed.

II. There are three places at which to review records:

   A. Records of current patients in the hospital.

   B. Incomplete records of discharged patients. Records become delinquent after 15 days.

   C. Filed records which are the completed records.

III. Basic questions about records:

   A. Is this record properly recorded?

   B. Is this record complete?

   C. Is this record clinically perfect? Records committee passes on this.

IV. Check for these facts for each individual entry on a record.

   A. When.

   B. What.

   C. Who.

V. Problems of records:

   A. Physical examinations are not properly recorded.

   B. Records must answer these questions:

      1. Why are they in the hospital?

      2. What was found?

3. What was done?
4. What was accomplished?
5. What instructions were given for further care?

C. Need to get the hospital to take responsibility for evaluating their own records.

D. Must record findings of examination and not enter general conclusions such as "normal" and "negative."

E. Checklists lead to carelessness in recording so they are usually not used.

F. Hospital is most open to legal action for the emergency room records. They must be complete.

PROGRESS REPORT--1957

During the five years the Joint Commission on Accreditation of Hospitals has been junctioning, there has been a steady gain in the number of accredited hospitals. This is shown in Table I. The 1952 figures indicate the number of hospitals accredited by the American College of Surgeons when the Commission came into existence.

TABLE I

NUMBER OF HOSPITALS ACCREDITED

	1952	1953	1954	1955	1956	1957
Total	3265	3395	3513	3630	3770	3857
U.S. & Possessions	3085	3111	3219	3319	3441	3525
Canada	269	275	285	302	318	321
Foreign	8	9	9	9	11	11

During the five-year period 1953-1957, the total number of hospitals which took part in the accreditation program was 4521. Of this number, 3857 (85.4%) are accredited and 664 (14.6%) are not accredited. It is encouraging to note that the hospitals not accredited are working diligently to achieve accreditation and many have requested re-survey. Experience has shown that progress toward accreditation is accelerated after a survey and improvement in patient care has resulted. Even though a hospital does not achieve accreditation on the first visit, a survey is of considerable value.

Table II shows the number of surveys that have been done by the Commission.

TABLE II

NUMBER OF SURVEYS CONDUCTED

	Total	1953	1954	1955	1956	1957
Total	7155	1306	1385	1378	1421	1665
U.S. & Possessions	6494	1213	1233	1234	1299	1515
Canada	649	92	151	136	120	150
Foreign	12	1	1	8	2	-

Of the total number of surveys done, 6390 (89.3%) resulted in accreditation and 765 (10.7%) in no accreditation. The proportion of those resulting in no accreditation has dropped from 11% in 1953 to 8.2% in 1957. The Commission finds this trend encouraging. It supports the theory that a large number of hospitals which have been surveyed and not accredited have the potential to become accredited.

It is estimated that there are 7,000 hospitals in the United States and Canada eligible for accreditation. Of this number, 55.1% are accredited. This indicates that we all have a long pull ahead.

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(1960) -- Frank B. Kelly, Jr., M.D., 122 South Michigan Ave., Chicago 3, Ill.
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*(1958) -- Alexander M. Burgess, M.D., 107 Bowen St., Providence 6, R.I.

American College of Surgeons

(1960) -- Howard E. Snyder, M.D., First National Bank Bldg., Winfield, Kans.
(1959) -- Walter C. MacKenzie, M.D., 504 Medical Arts Bldg., Edmonton, Alberta, Canada.
(1958) -- John I. Brewer, M.D., 104 South Michigan Ave., Chicago 3, Ill.

American Hospital Association

(1960) -- Frank R. Bradley, M.D., 600 So. Kingshighway, St. Louis, 10, Mo.
(1960) -- Rt. Rev. Msgr. Donald A. McGowan, 1312 Massachusetts Ave., N.W., Washington 5, D.C.
(1959) -- Stuart K. Hummel, 3321 North Maryland Ave., Milwaukee 11, Wis.
(1959) -- Jack Masur, M.D., Director, Clinical Center, National Institutes of Health, Bethesda 14, Md.
(1959) -- John B. Neilson, M.D., Ontario Hospital Services Commission, Parliament Buildings, Toronto, Canada.

*Designates year appointment terminates.

American Hospital Association (continued)

(1958) -- Ray E. Brown, 950 East 59th St., Chicago 37, Ill.
(1958) -- Albert W. Snoke, M.D., 789 Howard Ave., New Haven 4, Conn.

American Medical Association

(1960) -- James Z. Appel, M.D., 305 North Duke St., Lancaster, Pa.
(1960) -- Stanley R. Truman, M.D., 1904 Franklin St., Oakland 12, Calif.
(1959) -- W. Andrew Bunten, M.D., Boyd Building, Cheyenne, Wyo.
(1959) -- Dwight H. Murray, M.D., 1110 First St., Napa, Calif.
(1958) -- Raymond Peterson, M.D., 9 West Granite St., Butte, Mont.
(1958) -- Julian P. Price, M.D., 105 Cheves St., Florence, So. Car.

Canadian Medical Association

(1958) -- E. K. Lyon, M.B., 106 Talbot St. West, Leamington, Ontario, Canada.

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Peter D. Ward, M.D.
Earl F. Weir, M.D.

EDUCATION AND TRAINING

EDUCATION AND TRAINING

I. Topic: Education and Training.

II. Objective: To acquaint the students with the program and services of the American Association of Medical Record Librarians and with other programs of preparation.

III. Activities and Procedures: Lecture.

IV. References and Materials:

Beard, Margaret, "Changing World of the Medical Librarian," National Center for Audio Tapes, University of Colorado, Boulder.

Membership materials for the Association.

V. Assignments: None.

THE CHANGING WORLD OF THE MEDICAL RECORD LIBRARIAN

I. Changing patterns of medical care and their effect on medical record personnel.

  A. In the future the average American worker will need to be re-educated every seven years to handle his job.

  B. All hospital services are expanding and changing.

  C. The general practitioner in medicine is disappearing and is being replaced by the specialist.

II. Educational opportunities.

  A. Full-time educational programs for:

    1. Medical record librarians.

    2. Medical record technicians.

    3. Nine-month post high school course.

    4. Many junior colleges are offering a program.

    5. There are a few four-year college programs.

    6. A few hospitals offer a post A.B. program.

  B. Adult education programs.

    1. Correspondence education--1600 graduates of this course--must take exam after 25 lessons for accreditation.

    2. Basic institutes offered by organization.

    3. Special subject institutes.

  C. Literature put out by the organization.

    1. Journal.

    2. Newsletter.

    3. Monographs.

III. Membership in American Association of Medical Record Librarians.

  A. For medical record clerks.

1. Anyone may become an associate member.
2. Regular members are registered medical record librarians.

B. National membership includes state membership.

C. Meetings held both regionally and nationally for members.

1. Provide in-service help.
2. Disseminate up-to-date information.

DATA PROCESSING

DATA PROCESSING

I. Topic: Data Processing.

II. Objective: To introduce the student to the use of computers in data processing.

III. Activities: Lecture, discussion, and film.

IV. Materials:

  A. "The Information Machine," IBM Film.

  B. The ABC of IBM Punched Card Accounting, IBM handout.

  C. Key punching instruction sheet, IBM handout.

V. Assignments: None.

DATA PROCESSING

I. Introduction.

A punched card was distributed to each of the audience and a brief explanation was given explaining the recording of information in a form which could be used by a computer.

A brief description of the Record Librarian's place in Data Automation was given. The need for and present trends toward record standardization were explained. An instance of a computerized hospital running an operation index report in four hours was described; before automation the same report took three clerks one and one-half weeks.

The librarians were introduced to other methods of Data Processing recording including magnetic disks, magnetic tape and drum recording. These methods were compared briefly to the punched card.

II. A film, furnished by IBM, entitled, "The Information Machine," was shown. This is a ten-minute color film depicting the development of the electronic computer beginning with primitive man and ending with the advent of machine simulation. This film, available from IBM Corporation's film library explains why a computer was developed in a sophisticated and humorous manner.

III. A twenty-minute open discussion was held. The questions asked by the audience were primarily concerned with the need for rapid information retrieval. Most questions were answered with a reminder of the government reports which are being required from the hospitals.

The conclusion of the class following the presentation seemed to be that Data Processing was a fact in hospital management and that the Records Librarian's task would be aided through the use of computers.

The information presented to the seminar was taken in part from the following publications:

(1) "The Computer and Hospital Management," Financial Executive, January, 1967.

(2) "Hospitals of the Future," Reader's Digest, May, 1967.

(3) "The Medical Record Librarian--Data Automation Team Member," Hospitals, J.A.H.A., 1967.

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ATE OF ISCHARGE
Month
☐
1

CASE NUMBER
☐☐☐☐☐☐
2-7

HOSPITAL DAYS
☐☐☐
22 23 24

AGE
(newborn: mark through box)
☐☐
25 26

RELIGION
6 ☐ Catholic
7 ☐ Jewish
8 ☐ Protestant
9 ☐ Other
27

SEX
1 ☐ Male
2 ☐ Female

RACE
6 ☐ White
7 ☐ Negro
8 ☐ Asiatic
9 ☐ Other

ISCHARGE STATUS
Alive
☐ with approval
☐ against advice
☐ transferred
30
Deceased
☐ Autopsy
☐ No autopsy
30

ON ADMISSION

Enter both systolic and diastolic

	S	D	
1	☐	☐	220+
2	☐	☐	190–219
3	☐	☐	160–189
4	☐	☐	140–159
5	S ☐	D ☐	120–139
6	☐	☐	100–119
7	☐	☐	80– 99
8	☐	☐	50– 79
9	☐	☐	49–
	31	32	

HCT
Enter whole numbers only
☐☐
33 34

WBC
Enter in thousands only
☐☐
35 36

INVESTIGATION

URINALYSIS (check)
(check)
☐ Done 37
☐ Bile, Urobilinogen 38
☐ Kidney function 39
☐ Special 40

HEMATOLOGY
(check)
☐ C B C 41
☐ Sed. Rate 42
☐ Bone Marrow 43
☐ Special 44

MISC. LABORATORY
(check)
☐ B M R 45
☐ Pulmonary function 46
☐ Radioactive tracers 47
☐ Pap smear 48
☐ E K G 49

INVESTIGATION (continued)

CHEMISTRY
(check)
Sugar -50-
Electrolytes -51-
Nitrogen derivative -52-
Liver function -53-
Prothrombin time -54-
Proteins -55-
Cholesterol -56-
Amylase, Transanimase -57-
P.B.I. -58-

-RAYS
(check)
Chest, Respiratory
Skeletal
Digestive, inc. G B
Urogenital
Cardiovascular
CNS & CNS Spaces
Ext. soft tissues
Pleural & Peritoneal cavities, N.O.S.

TEMPERATURE
1 ☐ 99.0–less
2 ☐ 99.1– 99.9
3 ☐ 100.0–100.9
4 ☐ 101.0–101.9
5 ☐ 102.0–102.9
6 ☐ 103.0–103.9
7 ☐ 104.0–104.9
8 ☐ 105.0–plus
59

THERAPY

WHOLE BLOOD
1 ☐
2 ☐
3 ☐
4 ☐
5 ☐
6 ☐
7 ☐
8 ☐
9 ☐
60
(check number of transfusions 500 ml. or less)

☐ Cancer chemotherapy 61
☐ Radiation 62
☐ Oxygen 63
☐ Anticoagulants 64
☐ Antibiotics 65
☐ Physiotherapy 66
☐ E. S. T. 67
☐ Stroke Program 68

ATTENDING PHYSICIAN
☐☐☐
69 70 71

HOSPITAL SERVICE
☐☐
72 73

CONSULTATION
(number)
☐
74

HOSPITAL INFECTION
(check)
☐
75

OTHER COMPLICATION
(check)
☐
76

REFERENCE CASE
(check)
☐
77

SPECIAL STUDIES
(code)
R R ☐ ICU
75 76 77

☐☐☐ ☐
8 9 10 11 (1)
☐☐☐ ☐ (2)
☐☐☐ ☐ (3)
☐☐☐ ☐ (4)
☐☐☐ ☐ (5)
☐☐☐ ☐ (6)
☐☐☐ ☐ (7)
☐☐☐ ☐ (8)

OPERATIONS

☐☐☐ ☐☐
13 14 15 16 17 (1)
☐☐☐ ☐☐ (2)
☐☐☐ ☐☐ (3)
☐☐☐ ☐☐ (4)
☐☐☐ ☐☐ (5)
☐☐☐ ☐☐ (6)
☐☐☐ ☐☐ (7)
☐☐☐ ☐☐ (8)

OPERATING SURGEON
(for 1, 2, 3, 4)
☐☐☐
19 20 21

OPERATING SURGEON
(for 5, 6, 7, 8)
☐☐☐

TISSUE
1 ☐ Diseased – A
2 ☐ Diseased – B
3 ☐ No disease
4 ☐ Diagnostic
5 ☐ For special study
6 ☐ Gross only
78

APPENDICES

APPENDIX A

STUDENTS COMPLETING MEDICAL RECORD CLERK TRAINING PROGRAM

*Pauline Amicone
John G. Mehos, Administrator
The Salida Hospital, Inc.
Salida, Colorado

*Ruth Bagwell
Wayne Miller, Administrator
Conejos County Hospital
La Jara, Colorado

*Ruth Baker
Curtys Isaacson, Administrator
Haxtun Hospital District
Haxtun, Colorado

*Elizabeth Benton
Edward Frolich, Administrator
American Medical Center
Denver, Colorado

Nancy Bruner
Dr. Kayo Sunada, Administrator
State Home & Training School
Denver, Colorado

*Mary Kay Clair
Levi Schlabach, Administrator
Huerfano Memorial Hospital
Walsenburg, Colorado

*Kay Conner
Douglas R. Cook, Administrator
Valley View Community Hospital
Thornton, Colorado

*Nada Dwyer
Wendell Fuller, Administrator
Memorial Hospital
Greeley, Colorado

Nancy Edgley
Campbell Rice, Administrator
Emory John Brady Hospital
Colorado Springs, Colorado

Lavinia Ferguson
Milton Speicher, Administrator
Yuma Community Hospital
Yuma, Colorado

*Enid Garrett
Sister Judith Kuhn, Administrator
St. Thomas More Hospital
Canon City, Colorado

*La Dora Griffin
Kenneth Schmidt, Administrator
Pioneers Memorial Hospital
Rocky Ford, Colorado

Cheryl Hicklin
James Hughes, Administrator
Washington County Public Hospital
Akron, Colorado

Sue Huffman
Elsie Ryan, CRNA, Administrator
Hilltop Hospital & Nursing Home
Cripple Creek, Colorado

Selma La Selle
Dr. George Hill, Administrator
Weisbrod Memorial County Hospital
Eads, Colorado

Laraine May
William Bliss, Administrator
Rangely District Hospital
Rangely, Colorado

*Lorene Meinsen
C. A. West, Administrator
Grand Junction Osteopathic Hospital
Grand Junction, Colorado

*Martha Metcalf
Charles D'Spain, Administrator
Delta Memorial Hospital
Delta, Colorado

Roberta Miller
Milton Speicher, Administrator
Wray Community Hospital
Wray, Colorado

Betty Napple
James R. Deffke, Administrator
Longs Peak Osteopathic Hospital
Longmont, Colorado

*Beverly Neal
John T. Young, Administrator
Community Hospital
Durango, Colorado

*Doris Olson
Sister Mary Anselmo, Administrator
Mercy Hospital
Durango, Colorado

Mary Kathleen Perryman
Dale Button, Administrator
Montrose Memorial Hospital
Montrose, Colorado

*Bessie Jo Rienks
F. R. Carpenter, Acting Administrator
Solandt Memorial Hospital
Hayden, Colorado

Susie Scott
Harvey Hartzler, Administrator
Aspen Valley Hospital
Aspen, Colorado

Helen Simmons
Mrs. Alice Jensen, Administrator
Lincoln Community Hospital
Hugo, Colorado

*Eileen Stewart
Francis L. Scriven, Administrator
Kit Carson County Memorial Hospital
Burlington, Colorado

Virginia Stoker
Emory Namura, Administrator
Bent County Memorial Hospital
Las Animas, Colorado

*Margaret Williams
Levi Schlabach, Administrator
Huerfano Memorial Hospital
Walsenburg, Colorado

Judith Windrix
Arlan Grau, Administrator
Mamie Doud Eisenhower Osteopathic Hospital
Colorado Springs, Colorado

*Marlene Zehner
F. R. Carpenter, Acting Administrator
Solandt Memorial Hospital
Hayden, Colorado

STUDENT COMPLETING ONE WEEK OF TRAINING

Clara Pierson
Truett Ball, Administrator
Monte Vista Community Hospital
Monte Vista, Colorado

STUDENT COMPLETING TWO WEEKS OF TRAINING

Ruth Merrill
Sister Mary Magdalene, Administrator
Sacred Heart Hospital
Lamar, Colorado

*Students of the MRCTP who have either signed up or completed the AAMRL Correspondence Course.

APPENDIX B

SUPPLEMENTAL TRAINING--MEDICAL RECORD CLERKS

WEEK IV

MEDICAL RECORD CLERK TRAINING PROGRAM

Dates: August 19, 1968 - August 23, 1968

Place: Williams Towers, University of Colorado, Boulder, Colorado

Purpose and Objectives:

The results of the objective evaluations obtained by the University of Colorado at the conclusion of three weeks of classroom instruction revealed the level of achievement in some areas to be less than desirable. Therefore, one additional week of training was offered the students on a voluntary basis and at cost to the hospital.

Our objectives for the additional training were:

1. To focus on those subjects in which the level of achievement was less than desirable and in which review should result in better performance by the trainees in their hospitals.
2. To offer additional laboratory sessions to enhance the training given.
3. To offer additional support to students where needed.

PROGRAM SCHEDULE

WEEK IV

Monday:

8-10 a.m. Greetings George Goulette, University of Colorado
Welcome William Drause for Victor Esch, Colorado Department of Health
Orientation Virginia Lee, RRL, Colorado Department of Health
Evaluations Dr. Robert Whetstone, University of Colorado

10-12 noon Quantitative Analysis of the Medical Record
Virginia Lee, RRL

1- 4 p.m. Quantitative Analysis, continued

4- 5 p.m. Group Discussions

Tuesday:

8-11 a.m. Problem Solving and Role Playing (Discussion & Demonstration Session)
Mary Howard, RRL
Virginia Lee, RRL

11-12 noon Statistics
Mary Howard, RRL
Virginia Lee, RRL

1- 5 p.m. Statistics, continued

7- 9 p.m. "Jam Session"

Wednesday:

8 a.m. Leave Boulder - Bus Transportation

9 a.m.-3p.m. In-Hospital Training Session - Denver, Colorado

Beth Israel Hospital
Sally Rankin, RRL, Chief Medical Record Librarian
Sister Barbara, RRL, Medical Record Librarian

Childrens' Hospital
Margie Schank, RRL, Director, Medical Record Department

Mercy Hospital
Marion Black, RRL, Director, Medical Record Department

	St. Joseph's Hospital Loretta Lutz, RRL, Director, Medical Record Department
3 p.m.	Leave Denver - Bus Transportation
4 - 5 p.m.	Group Discussion

Thursday:

8 a.m.	Leave Boulder - Bus Transportation
9 - 12 noon	In-Hospital Training Session, continued
12 noon	Leave Denver - Bus Transportation
2 - 5 p.m.	Coding and Indexing ICDA, Mary Howard, RRL SNODO, Virginia Lee, RRL
6 - 10 p.m.	Individual Student Assistance Session

Friday:

8 - 9 a.m.	Birth and Death Certificates Donald Davids, Colorado Department of Health
9 - 10 a.m.	Medical Terminology and Basic Anatomy Margie Schank, RRL
10 - 11 a.m.	Medicare Certification Virginia Lee, RRL
11 - 12 noon	General Review and Discussion Virginia Lee, RRL
1 - 3 p.m.	Evaluations Dr. Robert Whetstone
3 -3:30 p.m.	Closing Remarks Dr. Robert Whetstone

COLORADO DEPARTMENT OF HEALTH

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George Goulette, Director
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University of Colorado
Coordinator, Education Program, MRCTP

Dr. Robert Whetstone
University Examiner
University of Colorado
Director, Evaluation & Testing, MRCTP

SAMPLE SCHEDULE FOR IN-HOSPITAL TRAINING FOR STUDENTS
MRCTP PH 110-232

Students divided into three groups, I, II, and III

FIRST DAY

9 am - 9:30	Orientation and Introductions, ALL
9:30 -10:30	Admission & Discharge Group I Analysis of Medical Record, Group II Correspondence Group III
10:30 -11:30	Statistics Group I Correspondence Group II Admission & Discharge Group III
11:30 -12:15	Lunch, ALL
12:15 - 1:15	Analysis of Medical Record Group I Statistics Group II Transcription Group III
1:15 - 2:15	Correspondence Group I Admission & Discharge Group II Analysis of Medical Record Group III
2:15 - 2:30	Coffee Break, ALL
2:30 - 3:30	Transcription Group I Physicians Index and Filing Group II Statistics Group III
3:30 - 4:00	General Review of Activities of the Day, ALL

SECOND DAY

9:00 -10:00	Physicians Index and Filing Groups I and III Transcription Group II
10:00 -11:00	Coding and Indexing, ALL
11:00 -12:00	Staff Committees, Incomplete chart procedure, minutes of committees, and review and questions, ALL

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